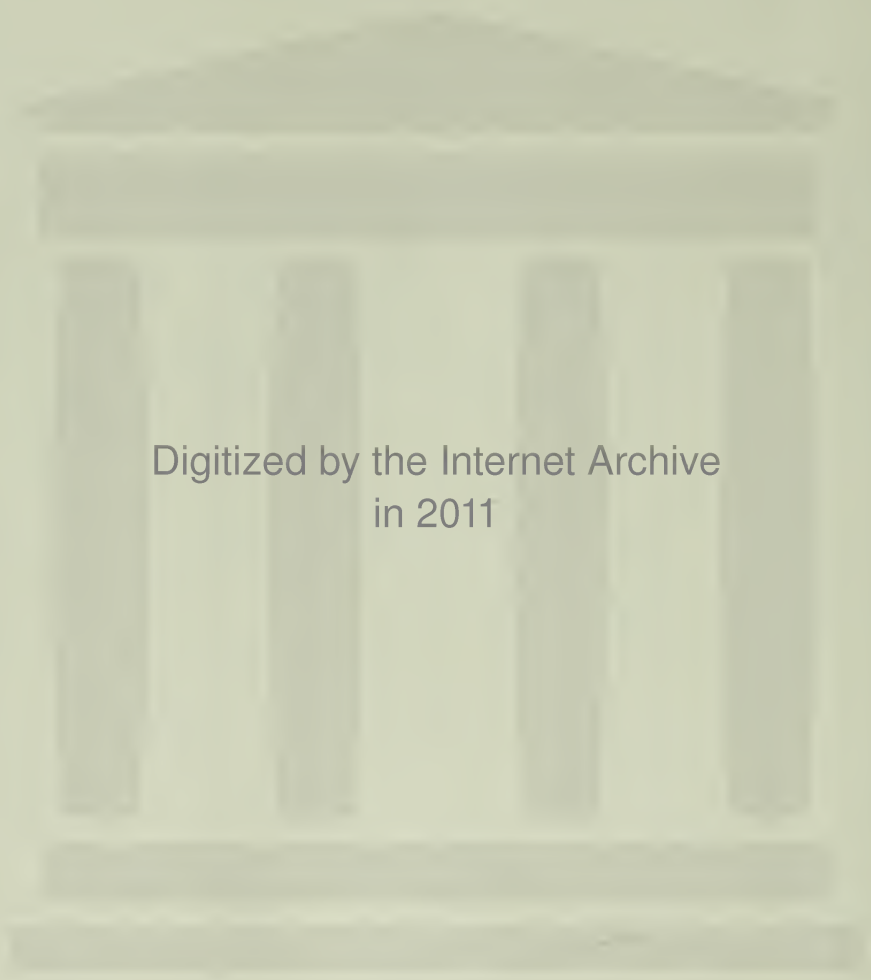




LANDS AND PEOPLES







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Lands and Peoples

THE WORLD IN COLOR

Volume 5

AFRICA AUSTRALIA OCEANIA



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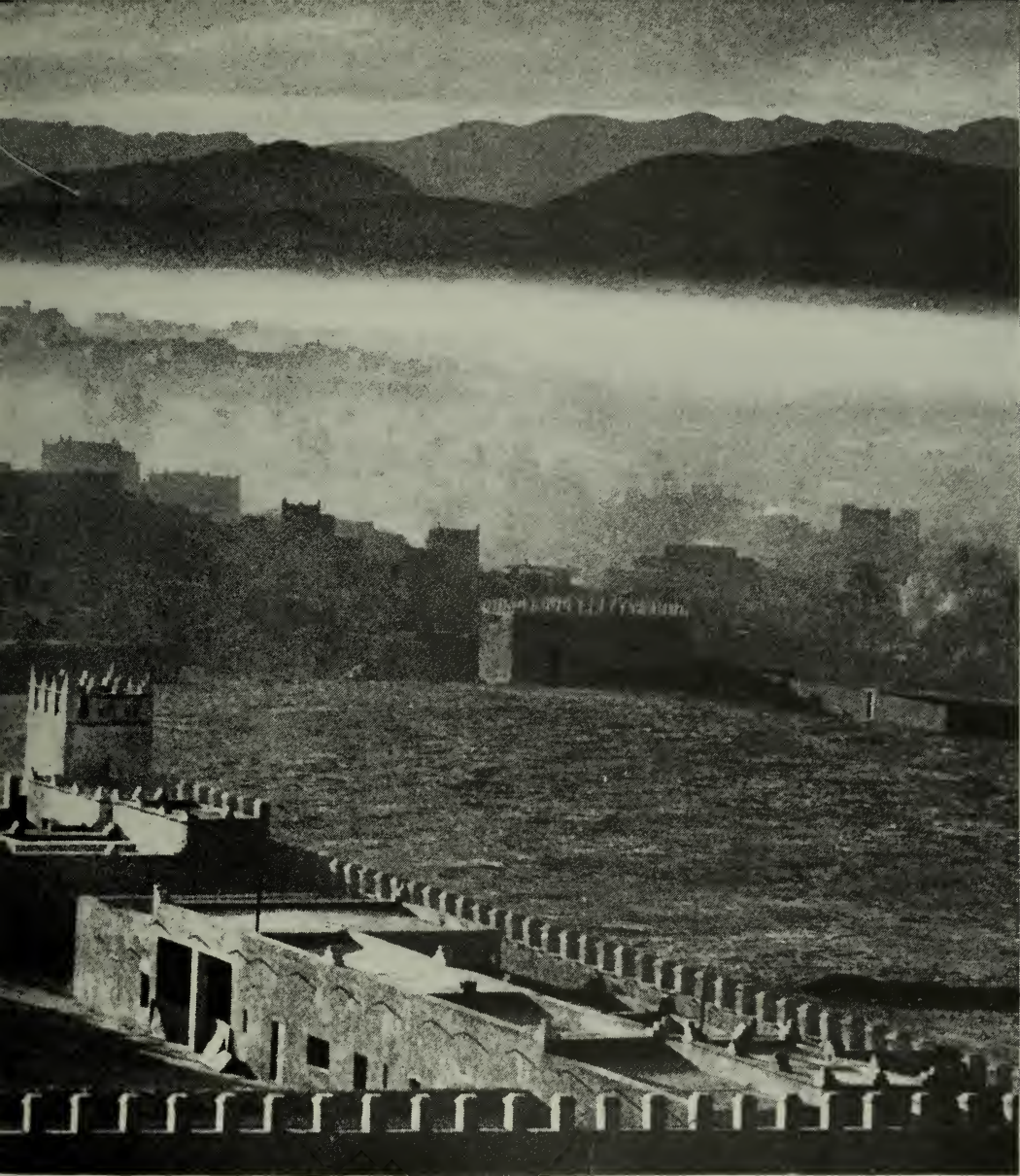
ESTHER BUBLEY

Morocco

*... Al Maghreb
el Aqsa*

MOROCCO embarked upon a new era in its history on March 2, 1956. On that date Morocco regained its independence. It was almost forty-four years to the day since the signing of the Treaty of Fez (March 30, 1912) which had established Morocco as a French protectorate.

In regaining its independence, Morocco joined the ranks of Afro-Asian countries that have emerged in recent years from colonial status to full sovereignty. Like these other states, Morocco is confronted



LIKE A MIRAGE the fortresslike *cas-babs* of Tinerhir oasis seem to shimmer in the heat south of the High Atlas.

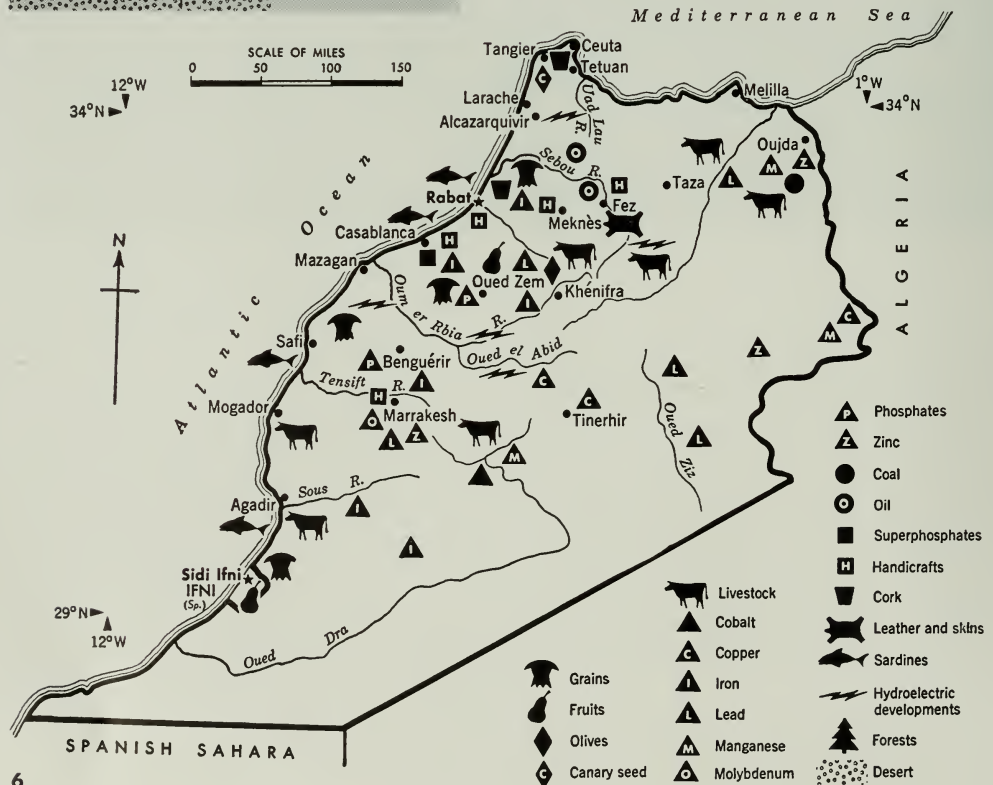
with a great challenge. It must effect a transition from colonial to independent institutions the while it makes adjustment to the modern world. Involved in this process are many basic problems. A politically secure government must be established. Economic development must be planned and carried out. Not least is the need for reconciling discordant elements of the population who are at different stages of development. In short, Morocco since independence has had the

enormous task of transforming a largely medieval empire into a modern nation, politically stable and economically healthy.

Morocco emerged from colonial status as a country divided into three distinct zones (French, Spanish and the international zone of Tangier). Each had its own currency, economic system and governmental administration. Overcoming

numerous obstacles, independent Morocco has become a unified country with a single currency and uniform system of administration. The economic barriers between the zones have vanished. Independent Morocco has also made notable progress in overcoming the traditional social and cultural cleavage between the ru-

Morocco has also assumed a new role in international affairs. Before independence, as a European colony, its relations with the world were circumscribed. Today, Morocco belongs to the Arab League and it has close contacts with the other newly independent states of Africa and Asia and enjoys friendly relations with other nations throughout the world. Morocco's declared international position is to steer clear of alignment with any single foreign power and to keep out of the conflict between the West and the communist



bloc. This policy shows in the Government's demand that foreign (French, Spanish and American) military bases quit Moroccan soil. The United States has agreed to evacuate its bases by 1963. This may well be accomplished before the deadline, as quiet withdrawal had already begun in 1960. Meanwhile, Morocco is using the agreement with the United States as an example the other powers should follow.

Relations with Spain and France have proved particularly delicate for independent Morocco. With Spain, difficulties persist over the status of Ifni, a Spanish enclave in southern Morocco. With France the situation is more complex and even more troublesome although here, too, the southern borders are a point at issue. The main factor is that the most advanced elements in the Moroccan economy—modern farming methods, city industries—had been developed and controlled by the French. For this reason, when Morocco won its freedom it was agreed that Morocco and France would continue to have close economic relations. Yet, it has been difficult to preserve these ties. The Moroccans resent this economic dependence as a remnant of colonialism, especially as few of them ever benefited from it. The prolonged rebellion in Algeria has also aggravated relations. Morocco has supported the efforts of the Algerian Muslim nationalists and has indicated that its goal is the eventual establishment of some form of Maghreb Union together with Tunisia and a free Algeria.

The test explosion of the French atomic bomb in the Sahara in February 1960 further strained relations between France and Morocco. In protest the Moroccan Government announced an end to the 1956 agreement on diplomatic "co-operation." Under this agreement, Morocco had been represented abroad by French officials.

Only a few days after the explosion in the Sahara, Morocco was shaken by one of the most terrible disasters in modern times. On March 1, 1960, two earthquakes followed by a tidal wave practically erased the resort of Agadir on the Atlantic coast. Loss of life ran into the



ROSS MADDEN, BLACK STAR

BUS STATION in the center of Tangier. The city's rapidly expanding suburbs have promoted use of such modern transportation.

thousands and survivors were left homeless. The waters had hardly subsided from the ghastly ruins, however, when the Moroccan Government announced that the town would be rebuilt.

Located on the northwest corner of Africa, Morocco has coasts on both the Mediterranean Sea and the Atlantic Ocean. In the days of Arab conquest, when the followers of Islam spread their faith throughout North Africa and even into Spain, Morocco, Algeria, Tunisia and Tripolitania (Libya) were known as Al Maghreb, "the west." Morocco was Al Maghreb el Aqsa, "the far west." The Arab Muslims in Spain were given the name of Moors because they reached Spain by way of Morocco.

Geography has played a role in Moroccan history in other ways. The country has natural barriers (more important long ago than now, of course). Besides the seas on two sides, it is ridged with mountains and the Sahara rims it on the south and southwest. Near the Strait of Gibraltar rise the Rif, a continuation of



DATE PALMS provide a little relief from the blazing sun in southwest Morocco. The women and children are waiting for eye treatment at a clinic of the United Nations Children's Fund.

SCRIBBLING in the dust on the first automobile he has ever seen enraptures a Berber lad. His home is in the remote, barren desert region of the southwest.



BOTH PHOTOS, ESTHER BUBLEY



TOM HOLLYMAN, PHOTO RESEARCHERS

ACROBATS, snake charmers, storytellers perform night and day in Marrakesh's square.

The day-by-day round of living

THE DEVOUT at prayer in the chief mosque in Rabat, capital of Morocco.

TOM HOLLYMAN, PHOTO RESEARCHERS



A CARAVAN plods along a modern road, the camels laden with all the worldly goods the family owns.

J. BELDEN



the ranges of southern Spain. Farther inland loom the Atlas Mountains, extending across central Morocco from the Atlantic to the Algerian border. There are three ranges: High Atlas, Middle Atlas and Anti-Atlas. The highest peak, Djebel Toubkal, in North Africa, soars to 13,665 feet in the High Atlas.

North of the Atlas Mountains, Morocco has a typical subtropical Mediterranean climate, where the summer heat is tempered by ocean breezes. This area gets sufficient rainfall to support a thriving agriculture. South of the mountains the land is sun-scorched and dry.

The Atlas Mountains form a watershed. Many streams flow from them toward the Atlantic. Longest of these is the Oum er Rbia though the Sebou waters the richest farmland. The streams that drain inland, after providing water for a number of oases, eventually vanish in the desert.

Naturally Morocco's most important cities are on or near the coast. The majority of Arab Moroccans are city dwellers. Much of the Medina, or Arab quarter, in present-day Rabat, the capital, is a tidy checkerboard of cube-shaped white-washed houses. Yet, it still has teeming byways where misery abides.

Casablanca, the Atlantic port, developed by the French, is extremely modern-looking on the whole, with skyscrapers and boulevards. But on the outskirts lie the *bidonvilles*, terrible slums of shacks patched together from *bidons* (tin cans), which the more radical Moroccans point to as examples of French colonialism.

Fez and Marrakesh were the old northern and southern capitals. Their most ancient quarters (Fez was founded in 808) are mazes of narrow, crooked alleys. Fez has the holiest Muslim shrine in Morocco, the Karaouine mosque. Marrakesh boasts the Koutoubia mosque, with a 220-foot-high tower. As it is in a very dry area, Marrakesh has somewhat the air of an oasis. Date-palm groves spread out to the north; and fruit trees blossom in a beautiful park, the Aqedal.

Because of its location, Morocco was permitted to live in relative isolation for many centuries. Tunisia and Algeria

came under the domination of the Ottoman Empire. Morocco, prior to being carved up into European protectorates, was an independent kingdom for more than a thousand years. After the Treaty of Fez was signed, France conceded to Spain a zone of influence along the Mediterranean which became known as Spanish Morocco. Since independence, this area has been called the Northern Zone.

The cultural heritage

In becoming independent again, the Moroccan people and their leaders regained the responsibility of a free government under circumstances totally different from those that existed before the protectorate was established in 1912. Before coming under French and Spanish rule, Morocco's government and society represented the vestiges of a glorious medieval Islamic Arabic-Berber civilization. Over centuries, Morocco experienced a long series of invasions by Phoenicians, Romans, Vandals and Byzantine Greeks. Yet the greatest and most permanent impact upon the country, until the twentieth century, was made by the Arab invaders of the seventh and eighth centuries. The Arabs converted the native Berbers to Islam, made Arabic the dominant language and established an independent kingdom that has remained in existence for more than a thousand years under various Muslim dynasties. At its height, from the twelfth to the fifteenth centuries, Morocco was a great intellectual center. For a time the empire stretched beyond the borders of Morocco northward into Spain and eastward to Tunisia.

But after the Moors were finally pushed out of Spain, in 1492, Moroccan civilization and power declined steadily. Toward the end of the nineteenth and the beginning of the twentieth century, Morocco was in no position to resist the more powerful and technologically superior forces of Europe. Its economy was primitive and static, its social structure antiquated and its political organization rudimentary and weak. Coming under French and Spanish domination, Morocco was exposed to Western industrialized society.

New attitudes toward life, new concepts of law, new social patterns and new ways of gaining a livelihood were all brought to Morocco by France and to a lesser extent by Spain. The presence of modern Europeans living side by side with the native population, accompanied by the economic innovations they introduced into Morocco, set off a process of social and cultural change that affected the entire country. Beneficial as well as disturbing effects resulted from this impact and led to the rise of nationalism.

Nationalism's roots

Modern Moroccan nationalism, although owing much to Western influences, is in both ideas and structure actually a mixture of old and new. Islamic traditions and modern Western attitudes are joined together in resistance to foreign domination. Since Morocco was the last of many African and Asian lands to come under the sway of European imperialism, Western influence was felt in Morocco for a relatively short period. Hence the changes in the country's basic society were limited. Even in 1956, most Moroccans were still living much as their forefathers had. On those, Westernization was hardly more than a veneer. But the leaders of the Moroccan nationalist movement were largely Western trained and educated. They were dedicated to the goal of bringing Morocco into the twentieth century by modernizing its way of life. Thus there is a wide cultural gap between the nationalist leaders and the Moroccan people. It is a crucial factor in Morocco's present development. Involved is the difficult adjustment of the values and patterns of a traditional society to the needs and goals of a modern society. The leaders of independent Morocco have a twofold and formidable task. They must advance the country economically and socially and at the same time convince the bulk of the Moroccan people that this program is desirable.

In government and politics, Morocco has been making slow progress toward a constitutional monarchy. Throughout the years of protectorate status, the Moroccan

sultan, or king as he is now known, in theory retained absolute powers. In practice, however, the real power was in the hands of the French and Spanish authorities. With their departure the King regained his authority as an absolute monarch. King Mohammed V, however, has long declared his intention to transform Morocco into a constitutional monarchy. Since independence, steps have been taken to develop modern democratic institutions by diffusing the absolute power of the king. The first such step was taken in November 1956 when the King appointed a seventy-six-member National Consultative Assembly. This is an advisory body without any formal power. It serves chiefly as a forum in which general policy can be debated. The most important innovation was the Royal Charter issued by Mohammed V on May 8, 1958. While not a constitution but a statement of intentions, it indicates the direction of political and administrative reform needed to achieve the goal of a "constitutional monarchy."

The 1958 charter

Specifically the charter provides for: 1) replacement of the National Consultative Assembly by a National Deliberative Assembly, which would share some of the king's power; 2) the eventual separation of powers between the executive, legislative and judicial branches of government and the establishment of an independent judiciary; 3) vesting of executive power in the cabinet, whose ministers would be individually and collectively responsible to the king; 4) guarantees of freedom of opinion, expression, assembly and association; 5) substitution of communes (not to be confused with Red China's communes) for the tribal system as the basic units of administration and representation; 6) election of municipal and communal councils, which in turn would elect representatives to the National Deliberative Assembly; 7) eventual election of an assembly through universal suffrage.

Originally, as a first step toward putting the charter into effect, municipal and communal elections were to be held soon after



ESTHER BUBLEY

GOATSKINS are tanned (in Fez) with sumac to produce the flexible leather often used in fine bookbinding.



ESTHER BUBLEY

SNAKE CHARMER in Tangier. The charmer apparently controls the snake by certain motions of his hands.

Ways of earning one's daily bread

BERBER HORSEMEN. The Atlas ranges are their home.

J. BELDEN



DOMED CONTAINERS and long-necked vases shaped from creamy white clay, the results of a Fez potter's artistry.

TOM HOLLYMAN, PHOTO RESEARCHER





HARRISON FORMAN. SHOSTAL

AN EXQUISITE MOSAIC with azure tints takes form from thousands of tiny handmade tiles.

A CLASS in hammered work at the school for native arts in Tetuan. Deli-

cate designs are pounded into burnished brass or copper articles.

D. FORBERT



the charter was issued. However, inasmuch as these first elections in the history of Morocco were both a new experience for the Government and people of Morocco, it proved quite difficult to prepare them. After several postponements, they took place in May 1960.

The problems met in preparing for these elections indicate the enormous difficulties of developing democratic political institutions in Morocco. The Moroccan people are still largely illiterate. Furthermore, they are tied to a traditionally authoritarian system. In the past they did as they were told and had few opportunities to make their own decisions. They are thus unprepared as yet to take full part in democratic politics.

Reflecting this politically unsophisticated society is a shaky party system first tested in the 1960 election.

Political parties

Two major political groups seem to be emerging from the Istiqlal (Independence) Party which led the Moroccans in the struggle for independence. The first, keeping the name of Istiqlal, is dominated by Allal el Fassi. He has long been a leader of Moroccan nationalism. As one of the older generation of nationalists, he is considered conservative and traditional. Rivaling this group is the National Union of Popular Forces, a coalition of younger and more progressive elements of the Istiqlal Party led by Mehdi Ben Barka. It is supported by the powerful Moroccan Trade Union Federation (UMT) and various other dissident elements.

In the economic and social fields the Moroccan Government has similarly taken initial steps in a long-range program. A series of projects have been started that aim at increasing the country's agricultural and industrial production, cutting its adverse balance of imports and exports, and elevating the standard of living. Many of the projects, such as Operation Plow and Operation Tree, have been undertaken not only with a view toward economic development but also as a means of training the Moroccan population in new methods. Unhappily, lack of capital, in-

efficient use of resources and a dearth of trained personnel hamper Morocco in such undertakings. To a certain extent, these gaps are being filled by the technical assistance and economic-aid funds made available to Morocco by friendly nations and United Nations agencies.

In 1959, Morocco established a national bank, the Bank of Morocco, with the right to issue currency. As a member of the franc zone, Morocco could not issue its own currency before. Although Morocco has not broken with the franc zone completely, its currency is now practically independent. In 1959 it was valued at 506 francs to the United States dollar in contrast to 420 French francs to the dollar. Moreover, exchange control between Morocco and the franc zone has been established to permit Morocco to develop its own reserves in hard foreign currencies. In 1959, Morocco renamed its currency, going back to a historic term—dirham. It has a value of 100 Moroccan francs.

Problems in education

In education, Morocco has begun a complete overhaul of its system. In fact, more of the national funds are being allotted to education than to the Army. The University of Rabat, the country's first modern liberal institution of higher learning, was established in 1957. It complements the traditional (Islamic) Karaouine University, at Fez, in existence for a thousand years. Nothing else is being pushed as hard as the drive against illiteracy. Literacy campaigns among adults are showing excellent results. Even more important, the number of children attending primary school is increasing rapidly. Attendance rose 20 per cent between 1958 and 1960. However, the problem is not solely one of numbers. It also involves subject matter and attitudes. Western ideas must somehow be blended with the country's Islamic Arabo-Berber heritage.

Socially, the contrasts between the old and new Morocco are equally vivid. Women are discarding their veils and seeking an education. There is a strong feminist movement, particularly, as one might expect, among younger women. A

number of women have become active in public life.

Reconciling modern viewpoints and tradition is a long, arduous process. It is

too early to assess achievement. Only the future can tell how well Morocco fulfills its declaration of intentions.

By BENJAMIN RIVLIN

MOROCCO: FACTS AND FIGURES

THE COUNTRY

Lies on the northwest coast of Africa; bounded on the north by the Mediterranean Sea and Strait of Gibraltar; on the east by Algeria; on the south by Algeria and Spanish Sahara; on the west by the Atlantic Ocean. Total area (including former French and Spanish zones and Tangier), 171,305 sq. mi.; population, about 10,330,000.

GOVERNMENT

In 1956, France granted independence to the French protectorate of Morocco, providing for interdependence between the two countries. Shortly thereafter, the Spanish Government relinquished its rights in the Spanish zone. All Morocco is now independent. The king is the chief of state and the religious leader. There is a cabinet. Local administration is largely in the hands of native pashas.

COMMERCE AND INDUSTRIES

About 80% of the people are engaged in agriculture. The chief crops are wheat, barley, oats, corn, flaxseed, citrus fruits (mostly oranges), olive oil and wine. Sorghum, beans, peas, other vegetables, almonds, oil seeds, dates and tobacco are also cultivated. Livestock raising (sheep, goats and cattle) is important, as well as fishing in the coastal areas. Chief industries are engineering, metallurgy, and production of foodstuffs, chemicals, construction materials, textiles, oils, tobacco products, glassware and

petroleum products. The principal minerals are phosphates, manganese and lead ores, cobalt, anthracite and petroleum. Handicrafts include rugs and leather goods. The chief exports are phosphates, barley, preserved fish, wheat and manganese ore. Imports include sugar, petroleum products, machinery and parts, cotton fabrics and other manufactures and foodstuffs. Most of the trade is with France. The Moroccan dirham is the monetary unit.

COMMUNICATIONS

Railway mileage, 1,170; roads, 6,830 miles. The principal airfield is at Casablanca; there are 5 major airports and 20 secondary fields. Telephones, about 128,133.

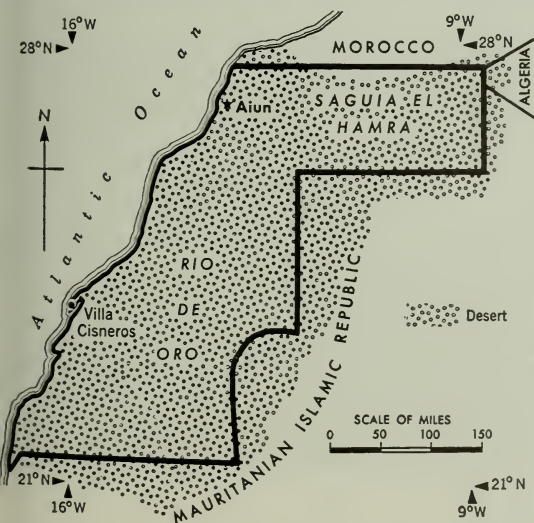
RELIGION AND EDUCATION

Most of the population are Sunni Muslims; there is also a large native Jewish group. Less than a third of the native population attend school. There are more than 1,700 public primary and 30 secondary schools, as well as 15 vocational schools and 5 institutions of higher learning. Schools are attended by native and foreign-born students. There are also modernized Koranic schools.

CHIEF TOWNS

Population: Rabat, the capital, 171,000; Casablanca, 742,000; Marrakesh, 230,000; Tangier, 162,000; Fez, 180,000; Meknès, 150,000; Tetuan, 94,000; Oujda, 85,000; Larache, 41,000; Alcazarquivir, 36,000; Mazagan, 35,000.

SPANISH WEST AFRICA: FACTS AND FIGURES



THE COUNTRY

Consists of (1) Spanish Sahara, located on the northwest coast of Africa on the Atlantic Ocean, southwest of Morocco; area, 115,234 sq. mi.; population, 38,000; (2) Ifni, an enclave on the Atlantic, on the southwest coast of Morocco; area, 741 sq. mi.; population, 44,000.

GOVERNMENT

Spanish West Africa is a colony of Spain. It has a politico-military government.

COMMERCE AND INDUSTRIES

Spanish Sahara, mainly desert, has some coastal fishing. It exports cacao. Ifni produces corn, alfalfa, grapes and other fruit, wheat and oats. Its coastal fishing is important.

CHIEF TOWNS

Population: Sidi Ifni, capital of Ifni, about 7,700; Villa Cisneros, capital of Spanish Sahara, 3,000.



J. STEFANIK. AMERICAN MUSEUM OF NATURAL HISTORY

KEYHOLE ARCHES in one of the gates of Fez, the spiritual home of the Moroccan Muslims.



MAYNARD WILLIAMS, SHOSTAL

THE BUSY HARBOR, in part, of Casablanca. It is protected by a jetty over a mile long.

THE CASBAH, the Arab quarter, of Tangier overlooks the Strait of Gibraltar and dominates the city's skyline to the north.

From the sea the Casbah appears to be a mass of gleaming white buildings but dark, twisting alleys thread them.

BURT GLINN, MAGNUM





TOM HOLLYMAN. PHOTO RESEARCHERS

THE HASSANE TOWER, a 180-foot-high minaret, is Rabat's chief landmark.



A PALACE GATE frames colorful guards in Tetuan, Mediterranean city of mosques and fountains.

City flavor—
from harbors
to palaces

BURT GLINN, MAGNUM



»

COURTYARD of a school in Tangier that was once a sultan's residence. With its shady walks, paved in cool tiles, the courtyard is a typical Moorish garden. A desert people, the Moors took special delight in the sound and sight of water.

Sub-Sahara Africa ... *from Senegal* *to Somaliland*

DRASTIC changes are sweeping Africa, not least in the areas that were long under French control. The Africans are on the march, demanding—and rapidly attaining—independence from the European colonial powers. Yet colonialism “spawned its own destroyer,” the fervent nationalism stirring throughout the continent. Colonialism developed largely for the profit and convenience of Europeans. Yet it brought to Africa a measure of rule by law, education, improved health standards, economic development, modern transportation and communication. Many of the best educated and most able African leaders were trained in Europe and America, and there imbibed ideas of self-government. Many other Africans heard about the Magna Carta, the American, French and Russian revolutions, the four freedoms, from their village radios.

Today these leaders and the people for whom they speak are determined to win freedom from exploitation and the dignity of managing their own affairs. For the first time in their history, many Africans are beginning to think of themselves as belonging to a nation rather than a tribe. Whatever the difficulties that result—and there are many—the new status arouses extreme enthusiasm.

No colonial power offered more opportunities to Africans than France. No other, since World War II, has been pouring as much money into Africa for cities, roads, ports, airports, dams and schools. Nevertheless, in 1958 France began to yield to nationalist sentiment south of the



UNESCO

Sahara. The French Constitution of that year, written under the supervision of President Charles de Gaulle, established the French Community. This replaced the old French Union. In voting for the Constitution most of the French territories were given what amounted to an either-or choice: to join the Community or to become completely independent. Only French Guinea voted to make the break, and became the Republic of Guinea. In entering the Community the others became internally self-governing. But foreign relations, defense, finance, control of strategic raw materials, justice, higher education, external transport and telecommunications were placed in the hands of the Community organization.

Out of French West Africa, besides the free Republic of Guinea, emerged the



AMAZEMENT, delight and sober thought grip Togolanders watching a film projected from a movie van. Such vans are an effective means of mass education in Africa.

Mauritanian Islamic, Senegal, Sudan, Niger, Voltaic, Ivory Coast and Dahomey republics. Out of French Equatorial Africa came the Chad, Central African (former Ubangi-Shari), Congo and Gabon republics. Since then the Senegal and Sudan republics have joined to form the Mali Federation. Free Guinea has made a provisional union with Ghana (former British Gold Coast).

The former French Cameroons and French Togoland, which had been United Nations trusteeships, became independent in 1960. French Somaliland remains a territory.

Meanwhile, the ties between the Community and France have been loosening. All of the Community republics gained the status of complete independence *within* the Community in 1960. Four of these

states—Ivory Coast, Niger, Dahomey and Voltaic Republic—formed a group called the Council of the Entente. This trend is toward an organization similar to the British Commonwealth of Nations, the members of which are sovereign nations, linked only by a rather vague allegiance to the British Crown. The Commonwealth is held together more by the economic advantages of belonging to a large group. To permit the Community to move in this direction the French Parliament amended the Constitution in 1960.

The experience of the Republic of Guinea further weakened the attractions of the Community as first set up. In

spite of predictions that Guinea could not stand alone, a fairly firm administration has been established. Freedom has also permitted Guinea to form the ties with Ghana mentioned and to discuss a similar association with Liberia.

For though nationalism seems to be splitting Africa into a number of small states, a cohesive influence is also at work—Pan-Africanism. Thus there is a strong movement among the new states, though their reasons may differ, toward close co-operation if not outright federation as in the case of Mali. In April 1960 a conference of 300 delegates from 50 African and Asian countries was held in Conakry, capital of Guinea. It called for the independence of all African lands by 1962 and at the same time planned a fight-for-freedom fund, an Institute of African-Asian Studies and an African-Asian common market.

Enormous problems face the new states. Except for the handful of educated leaders, most of the people are illiterate. There is no common tongue. Some 60,000,000 people speak more than 400 languages in West Africa alone. Moreover, in sub-Sahara Africa especially, the tribe is still the chief, if not the only, source of authority for most individuals. By and large the people get enough to eat but their diet is seriously deficient in proteins. This, together with heat and humidity, saps energy. Yet, to create the capital needed for economic development, living standards cannot be allowed to race ahead of production.

Under such circumstances, democracy as North Americans know it cannot yet be applied. To keep their states going the African leaders must assume an authority that looks dictatorial and even appears to be copying communist methods. Government in most cases, for instance, is in the hands of just one political party. The most dedicated and intelligent African leaders argue, on the other hand, that multi-party government is not necessarily the only form of democracy and that in any case the Africans must be allowed to work out the form of government that suits their conditions best.

As colonies, the new states were looked on chiefly as sources of raw materials. Consequently as they take the first steps toward complete self-government they are handicapped by unbalanced economies. Few are self-supporting at present. So they are going to need foreign help, financial and technological, for some years to come. Needing that help so urgently, offers are welcome from the communist bloc as well as from the West. The deciding factor may well be whichever offer has the fewest strings.

The Republic of Guinea serves as an example of what is involved. When it voted "no" to the French Community (as then set up) and "yes" to complete independence, all ties with France were broken at once. France quickly removed every trace of its administration from the infant republic, including financial and economic support. To stay in existence, Guinea had to look for help elsewhere. It needed small arms, for instance, to keep order and first requested them of the United States. But the United States, reluctant to risk offending France, was slow to respond. Czechoslovakia heeded the plea for small arms right away.

During 1959 and early 1960 the Soviets lent the Guinea Government \$35,000,000 on extremely easy terms. The loan has been used in part to buy communist-bloc products: Russian sugar and cement, Czech shoes and cotton textiles, East German matches and flour. In place of French and American cars, Czech and Russian models have been filling Guinea showrooms. Modern Hungarian buses carry passengers between Conakry (Guinea capital) and the city's airport. Guinea was to get an East German printing plant, so that at last the republic would have a daily newspaper. Dozens of Soviet engineers and technicians have been busily at work on a variety of other projects. More than 80 per cent of Guinea's foreign trade was with the West before independence; but early in 1960, at least 50 per cent of it was with the Soviet bloc.

Taken all together, the foregoing facts have an ominous ring. Eventually such an economic wedge could force Guinea



CAMERA PRESS, PIX

SALT CARAVAN on way to Timbuktu. Mali. Hitching the camels in single file keeps them all plodding at the same pace.

into the communist camp willy-nilly.

On the other hand a Western (American, French, British, Swiss and West German) combination of companies has invested \$150,000,000 in the development of Guinea's richest mineral resource, bauxite. The mining and refining project is known as Fria (the name of a small inland crossroads village on the site). Fria doubled the capacity of Conakry's port and constructed a ninety-six-mile railroad between Conakry and the project. A modern town, Sabende, came into existence nearby to house the company's employees. It has a population of about five thousand. Moreover, Africans are being trained to take the place of European workers. When it was officially opened in 1960, the Fria alumina (refined bauxite) plant was the largest one in all Africa or Europe. It has a capacity of 480,000 metric tons (529,104 short tons) of alumina a year. In 1957, Guinea was already Africa's largest bauxite producer, with an output that year, from other sources, of 366,000 metric tons (403,442 short tons). Fria, however, as it is a refining as well as a mining project, is a giant forward step in Guinea's industrial

development. However, a lot depends on how much Guinea itself eventually reaps from the project.

The Colonial Background

French overseas expansion in Africa began as early as the fourteenth century. Then Norman mariners explored the west coast of the continent and established trading posts in Senegal and Guinea. Though these expeditions had no government backing, the shipowners they enriched practically founded the French merchant marine. For a period the foothold in Senegal was lost, but was recovered by 1637. Expansion halted, however, until the nineteenth-century European "scramble" for Africa. At the end of World War I, Togoland and the Cameroons, which had become German territory, were divided between France and Great Britain.

At one time the vast area that came to be called French West Africa was known simply as the French Sudan. After World War II, under the French Constitution of 1946, the area acquired the status of an overseas territory. It was divided into Senegal, French Sudan, Niger, Upper Volta, Mauritania and the narrow coastal regions of French Guinea, the Ivory Coast and Dahomey.

The climate of the vast sub-Sahara

region was long considered too hot to be healthy for white men. Unpleasantly steamy it still is in many areas, especially along the coast. However, this has not prevented the development of such modern cities as Dakar and Abidjan. Air conditioning has become common in the large centers.

On the other hand, as few white farming colonists were drawn to the area the land has remained largely in the hands of Africans. One result is that the new republics are spared at least the problem of African-white conflict that so wracks the Union of South Africa, for instance.

Railways were late in coming to Africa, and some regions are as yet hundreds of miles from a rail line. There are hard-surface motor roads, but they, too, are scarce and poor in the interior. Long the principal means of travel in all of Africa, camel caravans are still important. Water travel has also been widespread, as central Africa has a generous share of long, navigable rivers. Air flights from Europe into Dakar and other important cities and towns are now regular occurrences, and airfields have been increasing in number throughout the territories. It is, therefore, rather simple to get a swift bird's-eye view of the continent.

The Rifts of Central Africa

As we fly over central Africa, we see below us the thick, tangled jungles that have made the airfield-builder's task so difficult. Moving on to the east we cross above two great Rift Valleys, cracks in the land mass filled with lakes and waterways from Lake Nyasa to the Nile and to the Red Sea. There are massive highlands through East and South Africa, and high country across Cameroon and northern Nigeria, but the Congo Basin lies in a great depression and the Sahara is in places (where it was once inundated) actually below sea level. Yet even this vast desert has the Ahaggar (Hoggar) Mountains, rising south of Algeria to as much as eight thousand feet and extending into the naked Tibesti or Tu Highlands, which in past

ages formed a bridge across the sands and stony wastes by which animals migrated from north to south. West Africa, however, has few mountains, though the Futa Jallon form the watershed of the Niger, the Senegal, the Gambia and other important rivers, and the Bauchi Plateau, Africa's great tin area, rises in northern Nigeria and Cameroon. The climate, so near the equator, varies rather in the amount of rainfall and the sharp change from noon to night rather than by seasons.

Oases and Camel Caravans

If we have flown from, say, Morocco across the Sahara, our first surprise will be to find, amid the stony red expanses and the white seas of sand dunes, occasional oases, green with date-palms, and inhabited by villagers, who offer succor to camel caravans en route to Timbuctoo and elsewhere. The oases are strung along the depressions where water rises to the surface, and these determine the great trade routes. A notable example of land reclamation is the Niger irrigation scheme of the Sudanese Republic, which has turned the inland delta of the river into a productive farming area.

France controls a large Sahara area, some of which is still unexplored. That it has been in the main waterless for centuries is evident from the Arab name "Sahira," which itself means "desert." Yet ancient dry watercourses indicate that the region may not always have been so desolate as it is today. While the major portion of the French Sahara is rocky, in the western part there is sand which often piles up into dunes a thousand feet high; and when the swift hot winds come sweeping along, they carry this sand in clouds, burying the thorny dwarf plants—until another sandstorm shall uncover them—and stifling men and caravan animals.

Timbuctoo of Desperate Deeds

In the southern part of this desert not far from the Niger lies Timbuctoo (Timbuktu), a Negro town of mud walls and dwellings that was an important center of caravan routes from Morocco and Guinea.



Though less important today with the decline of the caravan trade, it is accessible by two motor routes. It can also be reached from the coast by a railway from Dakar to Koulikoro, from whence a steamboat service runs to Timbuctoo seven months a year. The Negroes here are of different stock from the Bantus south of the Cameroons, though both are primitive.

In the eleventh century the Tuaregs, a nomadic people of Berber origin, occupied Timbuctoo, and left a long record behind them of oppression and slavery, robbery and desperate deeds. Now there lived along the Upper Niger a Sultan Samory, a slave-raider who had formed a brigand empire and sold probably a million and a half Negro captives to the Tuaregs in exchange for gold, ivory and cattle. These Negro slaves were called black ivory, and as the region abounded in the big-eared African elephants, there was much slaughtering of these beasts for their tusks of white ivory, and processions of naked slaves used to be sent to market carrying these tusks upon their shoulders. In 1880 a French captain of the marines, Joseph Simon Galliéni (the same who distinguished himself in World War I), was captured by Sultan

Samory and held prisoner until another French force had overcome the many ferocious small tribes of mixed Berber and Negro stock and imposed peace on the region, rescuing Timbuctoo from the rule of the Saharan Berbers. But by 1888 Galliéni had broken into Western Sudan and defeated Sultan Samory, who was, however, not captured until 1898. Timbuctoo is today a town in the Sudanese Republic (not to be confused with the Republic of Sudan, south of Egypt).

Now let us view the parched, stony and partly mountainous wastes of the Sudanese Republic. Circling above it, we see to the eastward a shallow great expanse gleaming like a steel mirror in a green frame. That is Lake Chad, which during the rainy season may spread to twenty thousand square miles in area, although during the dry season it shrinks to half that. Yet practically nowhere is it ever more than fifteen feet deep. The silver loops of two-thirds of the Niger River and all of the Upper Senegal lead our eye westward. These rivers grow with the rains of July to October until the Niger can accommodate small steamboats, though for five months or more it is too shallow. The lesser streams dry up, and



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DATE PALMS are the chief trees of the Saharan oases, and they provide the staple food of the desert tribes. Sometimes an oasis is merely a grove of palms around a well; sometimes, when the water is supplied by a stream, it is larger and more luxuriant and fruit and grain may be grown. An oasis may include a permanent village or even a small town.

their beds become overgrown with shrubs that grow like wildfire in that equatorial climate. The Republic of the Sudan and what was once the French Sudan (the word "Sudan" means Land of the Blacks) were for long a conquest of Turkey, which ruled it despotically through Egypt.

To turn southward for a short inspection, French merchants settled by the Gabun River above the Congo as early as 1839, and after the opening of the Belgian Congo, as described in the article *In the Heart of Africa*, the French secured a part of the Congo basin. Here it was that Du Chaillu discovered the gorilla. This and other parts of central Africa are amazingly rich in wild game—herds of elephants, with tusks heavy enough to employ four porters each, herds of vicious buffaloes, droves of vividly striped zebras, thick-skinned rhinoceri and clumsy hippopotami along the waterways, many varieties of the monkey tribe in the forests, herds of ostriches in the southern Sahara, to say nothing of the bright-striped zebras of the grasslands, lions, leopards, antelopes, giraffes and crocodiles.

Wild Berbers Tamed

Now if we are to continue our journey in logical order, we will fly from Timbuctoo across to the west coast of the Sahara to the Mauritanian Islamic Republic, one of the republics created out of French West Africa. Here live numbers of Berbers, who are Muslims. It is the men among them who veil their faces, for the practical reason that protection is needed against wind-blown sand. Years ago caravans feared their name, for they were and still are fierce fighters. In fact, their excellent fighting qualities helped the Allies in both world wars, against Germany. This is a rather ironic fact as it was Bismarck who induced the French explorer Jules Ferry to go empire building in the once dark continent.

Proceeding southward along the coast to the State of Senegal, we find an airport in the area from which Ferry started to the Upper Niger when he

claimed this valuable territory for the French. Senegal is a region of sandy soil where the natives cultivate groundnuts, corn, rice and millet. They weave and make pottery, as well as heavy jewelry of pure silver and gold, ivory and amber. There is a river service, during the rainy season, down the Senegal to the port of St. Louis, one of the chief entries to the whole area. It serves to carry the imports of the region and its exports, chiefly groundnuts (peanuts).

The Several Guinea Lands

Senegal is really the first of a series of coastal approaches (by means of either rivers or railroads) to the interior plateaus which are often called the Guinea Lands. Some of these have ties to other European nations besides France. All have much the same character, whether in Guinea, the Ivory Coast, Dahomey, Togoland, Ghana, Nigeria or the Cameroons. The country is monotonously flat, frequently separated from the ocean by sand-spit and marsh and infested by myriads of malaria-bearing mosquitoes and tsetse flies which cause sleeping sickness. The products are similar in all of these territories—groundnuts (peanuts), palm kernels and palm oils, coffee and cocoa. On the Futa Jallon Plateau in the interior of Guinea, cattle raising is an important activity. Diamonds and gold are mined in many parts of West Africa, particularly in the British territory of Sierra Leone and in Ghana, the latter of which used to be called the Gold Coast.

Many Enormous Swamps

All the way from the mouth of the Senegal to the mouth of the Congo, a region visited by heavy rains (at one place 390 inches in one year), there are large rivers rising in the hills and emptying into the Atlantic; and while these are at times broken by rapids, they are highways for native craft and small launches. But the coast is also characterized by mangrove swamps, and off the Bay of Biafra in the Gulf of Guinea is a colossal swamp into which more than twenty rivers discharge their silt. Here the oil-



EWING GALLOWAY

THE HARP'S THE THING IN DJIBOUTI'S STREET ORCHESTRAS

The spectacular object in the foreground is neither a fan nor an ornate headdress. It is a native harp—standard equipment for street orchestras in the coastal town of French Somaliland.



BLACK STAR

MELONS AND PEANUTS FOR SALE OUTSIDE TIMBUKTU'S WALLS

Timbuktu, in the French Sudan, was once a market for slaves and gold. The city is still a trading center and a halting place for caravans bound across the Sahara to Algeria and Morocco.



EWING GALLOWAY

SUN-BAKED DJIBOUTI, THE CITY ON A CORAL PENINSULA

Djibouti is on the Red Sea, facing the Gulf of Aden. This is one of the hottest regions in the world. The city is a free port and is linked by rail with Addis Ababa, capital of Ethiopia.



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CAVALRY TROOPS PASS IN REVIEW ALONG THE STREETS OF DAKAR

Native cavalry troops in their spotless white uniforms parade down one of the main streets of Dakar in the State of Senegal. A major transportation and communication center on the Atlantic Ocean, the city is famous as the entrance to the great hump of Africa. Dakar is strategically located on the coast of Senegal at the southern tip of Cape Verde Peninsula.

FROM SENEGAL TO SOMALILAND

palm flourishes, the coconut, palm, bamboo and rubber-bearing plants provide material for export, the extensive cultivation of cotton is a dream of the future. The forests are valuable for their mahogany, cedar, ebony and other rare trees, although these are usually linked together by lianas and difficult to lumber.

The Ivory Coast has two great lagoons connected with one another by a canal, Grand Lahou and the port of Grand Basam, with a lagoon over one hundred miles long and twelve feet deep, with jetties built to avoid the sand-bar at the harbor entrance. This opens up a region of pineapple and cocoa plantations and wild inland mahogany forests.

Dahomey reaches inland from primeval

forest across the great Lama swamp (now crossed by rails) to the rich grasslands or savannahs, interspersed by fresh-water swamp forests, where the huts are made of grass, and palm oil is extracted for market. On an inland plateau stands Abomey, the scene of the notorious "Customs" when, annually, scores of human victims were sacrificed to the ancestral spirits, that they might serve them in the beyond. The dominant people here are the polygamous Ffon (Fons, Jejs or Jefe), Negroes of the Ewe family, an offshoot of the Bantus, ranging from chestnut to a yellowish tinge and possessed of unusual keenness as traders. The lagoon port of Whydah (Hwedah), since annexed by France, was originally Portu-



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SUDANESE MUSICIANS play a primitive type of xylophone made of wooden bars and gourds of selected sizes. However, drums are the most popular musical instruments among Africans.



THIS PART OF THE SCHOOL DAY IS FUN

Little girls learn to sing a new song in the public school at Rufisque, a district in Senegal, one of the eight republics in former French West Africa. Their teacher is showing them how to clap their hands in time with the singing. Although education became compulsory in 1949, inadequate school facilities can serve only a small part of the population.



PHOTOS, FRENCH EMBASSY—INFORMATION DIVISION

CHEERFUL FISHERMEN HOPE FOR A BIG CATCH

Fishing is an important source of food for the natives in the African towns located along the Atlantic coast. These fishermen of the town of Thiès, in the State of Senegal, are preparing their nets for the day's work. Thiès is forty miles east of Cape Vert, the most western part of Africa, where Dakar, the capital of the State of Senegal, is located.

guese and Portuguese names are borne by many of the natives. Here the French built the first fort in 1671, at a time when the kings of Hwedah derived vast riches from the dues levied on the export of slaves and ivory. In 1777 Whydah was conquered by the king of Dahomey because the Whydahs, who were fetish worshippers, had placed nothing but their great fetish Dahn, a carved serpent, to guard a strategic ford, and it happened that the Dahomey leader feared only his own fetish, a panther. His king, Agaja Dosu.

has been called a Tamerlane in miniature. Dahomey's neighbor, Togo, rising to hills between three and four thousand feet in altitude, smelts iron as well as cultivates large plantations.

French Somaliland, finally, directly eastward of the new nation, itself called the Sudan, has hardly enough inhabitants all told to make a city, though they are a cosmopolitan assortment—Sudanese, Somali, Arabs, Ethiopians, Indians, Jews and others. There are salt mines, coast fisheries and some trade.

SUB-SAHARA AFRICA (IN PART): FACTS AND FIGURES

Former French West Africa consisted of Dahomey, French Guinea, French Sudan, Ivory Coast, Mauritania, Niger, Senegal and Upper Volta. In 1958, French Guinea became the completely independent Republic of Guinea. The others became self-governing republics within the French Community. For the republics of former French Equatorial Africa, see page 188 of this volume.

CAMEROONS

Formerly a UN trusteeship, French portion became independent in 1960. On Atlantic coast east of Nigeria. Area, 166,800 sq. mi.; pop., 3,188,000. Yaoundé, cap., 38,000; Douala, port, 119,000. Produces cocoa, timber, coffee.

DAHOMAY, REPUBLIC OF

On Gulf of Guinea between Togo and Nigeria. Area, 44,696 sq. mi.; pop., 1,713,000. Porto-Novo, cap., 32,000; Cotonou, port, 57,000. Produces subsistence crops, livestock, cotton, coffee. Rwy., 400 mi.; roads, 3,238 mi.

GUINEA, PORTUGUESE

On bulge of Atlantic coast north of Rep. of Guinea. Area, 13,948 sq. mi.; pop., 554,000. Bissau, cap., 20,000. A colony. Produces rice, palm oil, seeds, hides. Roads, 1,800 mi.

GUINEA, REPUBLIC OF

On bulge of Atlantic coast. Area, 94,925 sq. mi.; pop., 2,503,000. Conakry, cap., 40,000. Produces subsistence crops, livestock, coffee, bananas; has bauxite and iron-ore reserves. Rwy., 414 mi.; roads, 5,000 mi.; airport.

IVORY COAST, REPUBLIC OF THE

On Gulf of Guinea, west of Ghana. Area, 124,503 sq. mi.; pop., 2,485,000. Abidjan, cap., 130,000. Produces subsistence crops, livestock, cotton, mahogany; has gold and manganese. Rwy., 400 mi.; roads, 5,600 mi.; air service.

MAURITANIAN ISLAMIC REPUBLIC

On bulge of Atlantic coast south of Algeria. Area, 419,229 sq. mi.; pop., 624,000. Nouakchott, cap. Produces cattle, gum, salt, dried and salted fish; has iron ore and copper.

NIGER, REPUBLIC OF

South of Algeria and Libya. Area, 458,993 sq. mi.; pop., 2,415,000. Niamey, cap., 20,000. Produces livestock, cotton, rice, salt, natron, tin ore, gum arabic. Trans-Sahara motor routes.

SENEGAL, STATE OF

On bulge of Atlantic coast north of Rep. of Guinea. Area, 76,124 sq. mi.; pop., 2,269,000. Dakar, cap., 230,000. Produces livestock, gum, palm nuts, groundnuts; numerous industries in Dakar. Rwy., 1,000 mi.; roads, 5,000 mi.; 50,000 motor vehicles; international airport; 20,000 telephones. Primary schools, 255; University of Dakar established 1957.

SOMALILAND, FRENCH

On Gulf of Aden; an overseas territory within French Community. Area, 8,500 sq. mi.; pop., 67,000. Djibouti, cap., 31,000. Produces dates, tobacco, cotton, rubber, salt, fish. Rwy., 61 mi.; roads, 430 mi.

SUDANESE REPUBLIC

South of Algeria, was French Sudan. Area, 464,873 sq. mi.; pop., 3,708,000. Bamako, cap., 84,000. Produces livestock, groundnuts, rice. Rwy., 760 mi. (to Dakar); roads, 8,000 mi.; air service.

TOGOLAND

Formerly a UN trusteeship, French portion became independent in 1960. On Gulf of Guinea east of Ghana. Area, 22,000 sq. mi.; pop., 1,085,000. Lomé, cap., 40,000. Produces subsistence crops, coffee, cacao, cotton, palm kernels; has phosphates, chrome and iron ores, bauxite. Rwy., 275 mi.; air service. Over 40% of children attend school.

VOLTAIC REPUBLIC

Former Upper Volta; north of Ghana. Area, 105,839 sq. mi.; pop., 3,326,000. Ouagadougou, cap., 35,000. Produces livestock, corn, rice, cotton; has manganese, copper, gold, diamonds. Rwy., to Abidjan; roads, 8,000 mi.; air service.



Algeria, Tunisia

and Libya ...between the desert and the sea

ALGERIA, Tunisia and Libya stretch between Morocco, on the west, and part of the United Arab Republic (Egypt), on the east. The native populations of all three are Muslim, mostly Arabs though including Berbers and a few other smaller groups. However, though they share the Mediterranean shore, a common past and a common faith, Islam, the three are at quite different stages of development.

Basic to the situation in Algeria is the fact that besides some 10,500,000 Muslims it has about 1,200,000 Europeans—thus outnumbered ten to one. At the same time the majority of the Muslims,

poor, illiterate and with little ability or chance to express themselves, are to an extent innocent victims of the struggle that has raged in Algeria since 1954. The FLN (National Liberation Front) of Algerian nationalists, fighting for independence, is drawn mostly from the comparatively small number of educated Muslims.

The Europeans in Algeria have come from all over the Mediterranean. Many of them are small tradesmen and the like and are clustered in the large cities. Those Europeans most in the news, however, are the landowning, prosperous



been restless on still other grounds. When the FLN opened up guerrilla warfare in 1954, the soldiers were brought in chiefly as a police force. Many of them had come fresh from the humiliating defeat in former French Indochina. Yet in the role of police they could win no final victory in Algeria either, and it has been a frustrating experience. As for the French Government, the strife in Algeria, besides tying up thousands of troops, has been draining the treasury of some \$1,-000,000,000 a year.

It was this situation that led to the uprising of the colons and the Army in 1958. The Government, as set up under the Fourth Republic, proved helpless. Then it was that General Charles de Gaulle returned to power and the Fifth Republic was born. It seemed to most Frenchmen that only De Gaulle could solve the terrible problem. Yet early in 1960 the extremist colons, the "ultras," attempted another revolt. This time De Gaulle prevented the body of the Army from going over to their support.

De Gaulle has admitted that the only solution is by "the free choice of the Algerians themselves." But first, he insists, there must be peace. Within four years after a cease-fire the Algerians would then be permitted to cast their vote for integration with France, association with France or complete independence. The FLN is suspicious of a cooling-off period. Could the implied promise then be kept by De Gaulle or his successor? Meanwhile, the Army, with De Gaulle's backing, has stepped up its efforts to "pacify" the country, even as the Algerian rebels have opened their ranks to foreign volunteers. Later in 1960, De Gaulle invited FLN leaders to Paris for talks, reviving hope of settlement.

French colons (short for "colonists"), an extremely vocal group of perhaps 15,000 to 20,000. By and large it is the colons who control the Algerian economy. (France itself is investing large sums in the development of oil in southern Algeria.)

Algeria presents a problem that has not two but four sides: the FLN, the colons, the French Army in Algeria, and, last but not least, the Government of France, whose chief authority since 1958 has rested with President Charles de Gaulle. The FLN wants complete independence from France. It rejects the idea of secession, or partition, by which some parts of Algeria would become free and the rest remain French, because the richest sections of the area would likely fall to the colons. (President de Gaulle also rejects secession.) The colons are equally insistent that Algeria stay a part of France. (In government structure the northern departments—states—of Algeria are considered as much regions of France as, say, Normandy.)

The French troops in Algeria have

Tunisia presents a somewhat more

cheerful picture. Since it gained independence from France in 1956 it has achieved the most stable Government in North Africa. Only one political party, the Neo-Destour (National Union), counts in Tunisia but it is led by an extremely able and dynamic individual, Habib Bourguiba. The country acquired a constitution, based on the United States model, in 1959. In the first general elections, which followed a few months later, Bourguiba was re-elected president almost unanimously.

By all accounts this was not a "command performance" but evidence of genuine popularity. Each provincial capital has a little government center that aims to keep the people informed on the activities and policies of the Government. Bourguiba himself takes to the radio for an hour-long talk every week. Far from being a firebrand in these talks, he stresses home problems rather than foreign affairs: the need for economic improvement, for investment, for hard work. He shocked many devout Muslims by advocating that work go on as usual during Ramadan, the sacred month of fasting.

It is on the economic front that Tunisia is weak. There is always the threat of drought, which can ruin crops and decimate livestock. Industry lags for want of capital; and considerable unemployment remains. Nevertheless, signs of lively progress abound. Acres of orchards have been planted, to yield fruits and nuts. Monastir, a town on the coast, is being made over into an attractive resort. The tourist trade is already substantial.

In foreign relations, Tunisia toes a delicate line. Bourguiba is decidedly pro-West. He has taken his country out of the Arab League, and in 1958 broke diplomatic relations with the United Arab Republic. On the other hand, suspicion of France lingers among the Tunisians, and they are naturally sympathetic with the FLN in neighboring Algeria. In fact, the headquarters of the FLN are in Tunis; and some twelve thousand of the Algerian rebels have found refuge in Tunisia.

Thus Tunisia is deeply involved in the

Algerian conflict. Charges and counter-charges of border violations are constant. Bourguiba has demanded that the French quit the naval and air base at Bizerte. At the same time the Tunisian economy is still closely linked to France, though Tunisia broke away from the customs union with France in 1959. Cultural ties are close as well. No other North African people have been so strongly influenced as the Tunisians by French arts and letters. Many Tunisian leaders also were educated and learned their republican politics in France.

Libya became free rather early (1951) in the game of political musical chairs being played in Africa today. It had been a possession of Italy, the last of Libya's many conquerors, before World War II. After that conflict the UN made it independent and has played a large role in its affairs since. Without the UN and a stream of aid, both financial and technical, from the United States and Britain, the kingdom could not survive. The Libyans know they need help but do not like foreigners of any political complexion. The Government steers clear of embroilment in Arab affairs, is cautious with the West and detests both Israelis and Communists.

Though almost three times the size of Texas, Libya is a naturally dry waste of rock and sand. There the Sahara reaches all the way to the Mediterranean. The country's only resource of any consequence is oil. It was discovered in the western desert in the late 1950's. That field is being developed while prospecting continues elsewhere. If oil gushes forth in any great quantity, Libya's future is certain to take a new direction.

The people are among the most desperately poor—and illiterate—of any on earth. Nevertheless, gains are being made, slowly but surely. The average income per person a year rose from about \$35 in the early 1950's to almost \$100 in 1959. UN agencies are pushing a variety of projects: the beginnings of an educational system; training of Libyan technicians; health and sanitation measures; improvement of livestock and range

ALGERIA, TUNISIA AND LIBYA

management (which could result in better wool on which to base a rug industry); forestry experiments. The United States has built more than thirty-five schools and equipped five teachers' training colleges. (Libya had no colleges whatever before.)

A major reason for the interest of the United States is the lease from King Idris I of Wheelus Field, near Tripoli, the largest American Air Force base outside the United States. In 1959 about 12,000 Americans were posted there, and 2,500 Libyans were employed.

As if two capitals were not enough—Benghazi and Tripoli—a third began to rise in 1959, New Beida. The kingdom was set up with two capitals to keep the provinces of Cyrenaica and Tripolitania

united. However, the original capitals are seacoast cities, stifling in summer. New Beida is being erected on an interior plateau, clothed in junipers, near the palace in which the King lives in the summer months.

For centuries these lands were in an almost continuous state of war with one or another of the European powers, because their ports sheltered swarms of pirates and slave traders who boldly seized merchant ships or even small war vessels, confiscating all property and holding for ransom the captives. It came about that most of the nations of Europe were paying large tribute to these Barbary states in order to be free from their piratical attacks. After the American Revolution, when the United States, no

THE HUMAN SIDE in Algiers: elderly Frenchwomen, hatted; and Muslim women, veiled.

FRANK HORVAT, BLACK STAR





EWING GALLOWAY

WELCOME SIGHT: AN OASIS WELL IN THE HEART OF THE SAHARA

The oasis well above with its coping of gypsum is in southern Algeria. Such little desert wells are fed by underground streams and may reach a depth of between twenty and fifty feet.

longer under the protection afforded by Great Britain's tributes, sent a fleet to force the plunderers to peaceful ways, other nations did likewise and eventually the rulers promised to reform their countries. But the old Arab genius was lacking, and another country gradually assumed control in Algeria and Tunisia.

It was the French who seized this opportunity of acquiring a vast colonial empire. European settlers (the *colons*, mostly French) began to come after 1830. In Algeria, in 1956, there were about a million *colons*. Along with the settlers came roads, railways, electric power, schools. The benefits of progress, however, just barely trickled down to the basic population, mostly Muslim Arabs and Berbers. The contrast between their standard of living and that of the *colons* was glaring. This situation fed the flames of nationalism, flaring up everywhere in North Africa in the 1950's. In Algeria, guerrilla warfare and terrorism broke out in 1954. Two years later the conflict had become practically a full-scale war. French troops poured in. The *colons*, determined to keep their prosperous holdings, formed armed committees. Late in 1956, in spite of numerous attempts at negotiation, the terrible struggle was still going on.

Algiers, the capital of Algeria, was a haven for pirates long ago. Today it is one of the most important ports in the Mediterranean Sea.

Algiers might be compared to a tumble-down house in which the drains have been repaired and the lower floors rebuilt, while the ancient attics remain the same. The attics of the town are the pirate town. Gleaming white against the blue of sky and water, it climbs above the mansions and the wharves of the intruders, and from a distance it looks like a pile of ivory dominoes. Each little flat-topped house seems to be peering over its neighbor, and at the summit is the Kasbah, the fort of the old Arab rulers.

Hidden Beauties of the City

In bygone days, the sight of a strange sail on the horizon would cause these

roof tops to be crowded with excited people. Was it the ship of a Barbary pirate returning laden with plunder and slaves? Piracy has come to an end, but the Algerians still climb to their roof tops to watch for ships. Algiers was a base for Allied forces in World War II.

The old town is without a real street, and its winding alleys are closed to all save pedestrians and little, laden donkeys. Many of the houses are built over these alleys, up which climb white-clad Arabs with slippered feet. Blank, white-washed walls line these narrow ways, for the houses, like the Arab women, hide their beauty. Inside them we should find cool courtyards in which fountains play, and carved balconies overlooking the enclosures. Beautiful tiles cover the walls, and the plaster is molded into intricate patterns.

The bazaars of Algiers are fascinating places, in which the old life of the town can be seen. The shops are little booths raised from the ground, at which the owners sit cross-legged waiting for their customers. There are shoemakers' shops, where the wizened craftsmen sit stitching at heelless colored slippers. On all sides are piles of slippers, tasseled and embroidered in scarlet and green silk.

Fair People of the Algerian Hills

Here is a jeweler working with such tools as were used in Harun-al-Rashid's Bagdad. There are metal-workers, hammering brass into the most delightful bowls and boxes; and through the throng moves the itinerant water-seller, and the Maltese who has wandered up from the French town to sell picture postcards to travelers. The whole atmosphere of the crowded, noisy market place is gay. It is an exotic, story-book place; and the turbaned heads of the merchants, bending over their earthen jars and brilliant fabrics, awaken memories of the Arabian Nights.

From the old town can be seen the wooded slopes of the hills, where the Kabyles, or Berber Arabs, live. They are a distinct race of people and are the descendants of the original inhabitants.



EWING GALLOWAY

IN THE SEACOAST CITY of Homs, the beehive dome and slender minaret of a mosque gleam dazzling white in the sun. Homs lies in Tripolitania, which is a part of Libya.



PHILIP GENDREAU

AT A PEPPER MARKET in Nabeul, Tunisia, red peppers are piled so high that they nearly hide the cart that carries them. They are highly prized for their sharp, biting flavor.



EWING GALLOWAY

A BROAD WHITE BOULEVARD IN THE MODERN QUARTER OF ALGIERS

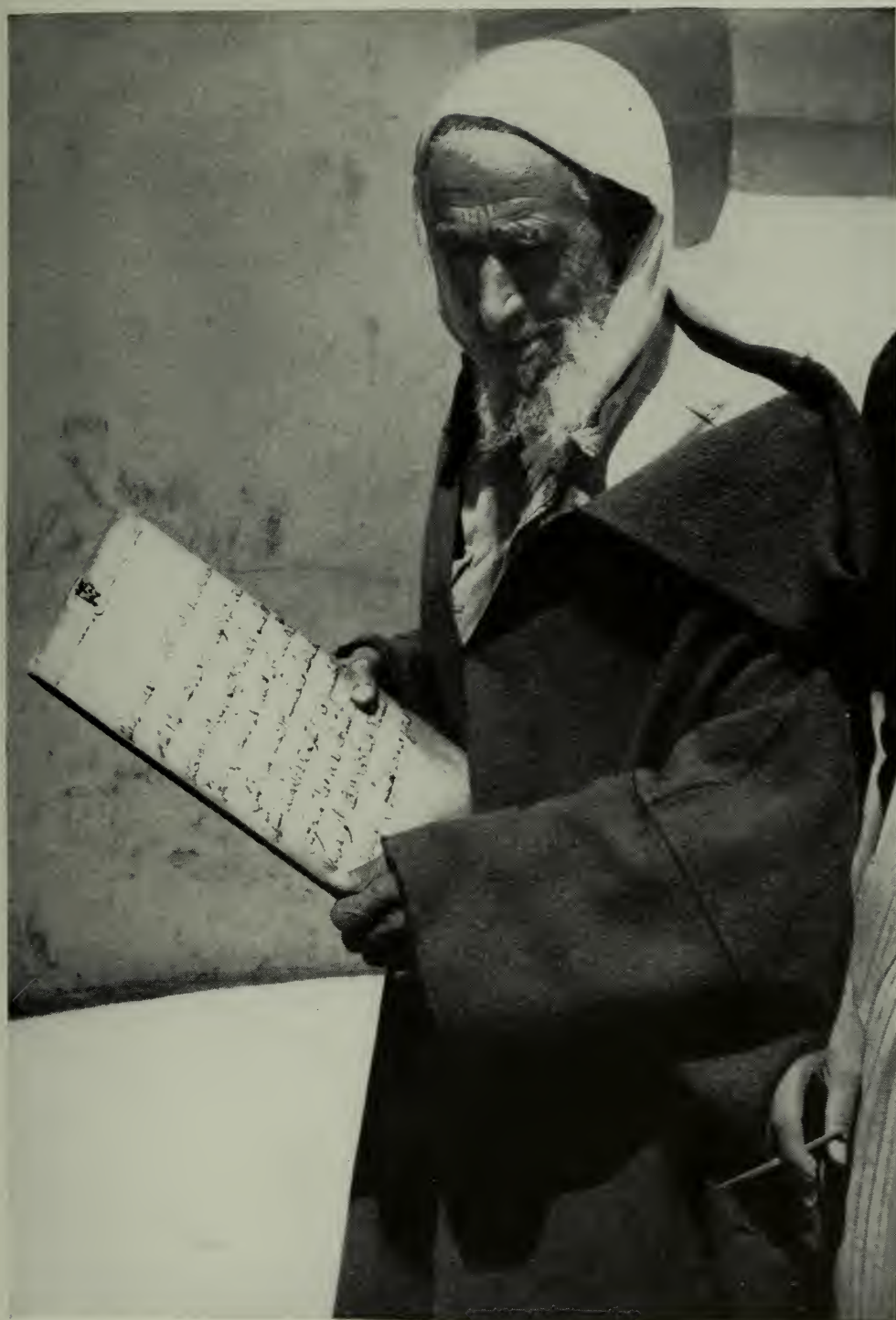
Large buildings that house business and government offices, department stores and hotels line the Boulevard de la République, one of several fine streets in the heart of Algiers.

Many of them are fair. They are farmers and graziers, and on the hillsides are fields, pastures and orchards.

Agriculture has flourished in Algeria. The French encouraged farming, especially among the *colons*, and developed a number of irrigated areas. Although the Arabs, as a rule, use the most primitive methods in working their farms, they produce large quantities of wheat, barley and oats, a variety of vegetables, tropical fruits and tobacco, most of which are shipped to France to keep the markets

supplied during the winter months. From the grapes, which also grow luxuriantly, large quantities of wine are made. The fertile part of Algeria is a narrow strip of land bordering the sea; farther south and running parallel to the coast, there are the high plateaus of the Atlas Mountains, which extend to the waste of sand and rugged hills on the northern edge of the Sahara Desert.

Traveling through Algeria, we shall see orange groves, cornfields and the red-roofed farmhouses of settlers. In places



BLACK STAR

AN AGED SCHOLAR WITH AN ANCIENT TEXT FROM THE KORAN

A teacher at the Tlemcen, Algeria, mosque school instructs his class with a board, on which are printed, in Arabic, quotations from the Koran, sacred scripture of Mohammedans.



IN KAIRAWAN (OR KAIROUAN), once a forbidden city to all "Unbelievers," we may now wander without hindrance. We may even go into the mosque, a thing we can do in no other Tunisian town. This is strange when we consider that Kairawan is, after Mecca and Medina,

the most sacred city in the eyes of the Mohammedans. In 1881, the French forced an entry through one of the five gates in its walls and much of its sanctity was destroyed. Although now connected by railway with the coast, it has been little modernized and is still essentially Arabian.



© CRETE

ALGERIAN GIRLS are often quite beautiful, as witness this jewel-decked Kabyle who so proudly displays the charms of her person and raiment. The beauty of the women-folk—a beauty they lose very early—is not surprising considering the thousands of lovely girls who were captured by the Barbary corsairs and were brought back for the Algerian harems.



TRANS WORLD AIRLINES

RUINS OF CUICUL AND THE TRIUMPHAL ARCH OF CARACALLA

At Djemila near Setif in Constantine Department are the ruins of ancient Cuicul, a Roman town. It flourished in the third century A.D., during the reign of the Emperor Caracalla.



EWING GALLOWAY

SPARKLING WATER FLOWS TO MAKE A THIRSTY LAND FLOURISH

A diesel engine turbine pump provides water to irrigate orchards and truck gardens in fertile valleys near Tunis that get little rain. The soil is well suited to the growing of fruit.



© LEHNERT & HARDROCK

THE AFRICAN MECCA, the holy city of Kairawan, or Kairouan, is in Tunisia and stands in a plain once covered with gardens and olive and orange groves. It is now barren except for a scrub of sage, though the soil is fertile and water is not wanting. When, in 670, Sidi Okba, a great

Moslem soldier, wished to found, in Africa, a city that would be the rallying point for the Mohammedans, he is said to have stuck the butt of his lance in the ground in the middle of what was then a forest, and said, "Here is your Kairawan" (resting-place), thus naming it.



© LEHNERT & HARDROCK

THE GATE OF THE DESERT, towards which we are looking from the Saharan side, is very fittingly named, for the train that carries us to Biskra has been running for hours through narrow mountain gorges, and, by means of tunnels, through chain after chain of rugged desolate

mountains. Suddenly it issues from a tunnel into the gorge of El Kantara—"the Gate of the Desert"—and nothing but flat desert lies before it. The palm trees, the crumbling wall and the mud house are in the oasis of El Kantara. The mountains belong to the Aurès system.

we may see herds of camels grazing on the hillsides. The Arabian camel is used throughout North Africa, and without him commerce and travel would be almost impossible, though motor cars are being used more and more.

Situated on a rock over two thousand feet in height, which is cut off from the surrounding country on three sides by a beautiful ravine is the city of Constantine, aptly named by the Arabs "the city of the air." It is an ancient city rebuilt by Constantine the Great in the fourth century on the site of a Roman colony. Within the past one hundred years, new streets have been laid out and many fine buildings constructed, but the native quarter with its winding lanes and flat-roofed houses, remains truly Oriental.

Algeria's Largest Oasis

From Biskra, an oasis noted for its beauty, we can take a peep at the desert. The town is a great meeting place for the desert people, and if we stay there long enough we are almost certain to see representatives of all the tribes inhabiting the Sahara. Biskra is well-watered by underground springs, and hundreds of thousands of date palms grow in the neighborhood. There are half a dozen Arab villages in the Biskra oasis, but the town itself is a curious mixture of ancient and new, for its delightful winter climate has made it a popular resort with several fine, modern hotels.

In a shady corner we may come upon an old marabout, or holy man, tracing figures in the sand. He has charms and amulets—pink coral to avert the evil eye, the hair of a four-months-old baby for protection against scorpions, verses from the Koran sewed into leather bags, and many others. He earns his living by selling these charms to superstitious Arabs. Past him hurry energetic tourists, equipped with guide books and sunglasses, perhaps accompanied by a Negro in a goatskin cloak.

In the Tunis of Today

When the Phoenician mariners first sailed into what is now known as the

Gulf of Tunis they saw on the horizon the symbol of their deity Baal, the Horned God—a happy omen, which, we may be sure, was not lost upon the founders of Carthage and Tunis. And today the pine-clad pinnacle of Bou-Cornein, which in Arabic means "the Father of Two Horns," is the most conspicuous landmark on the coast. It is so called because the summit is curved, forming two horns.

For some years, Tunisia was a kingdom within the French Union. In 1955, it won self-government and the next year, practically complete independence. It remained a kingdom, under the Bey of Tunis, and elected a prime minister. On July 25, 1957, the National Constituent Assembly voted to depose the Bey and proclaimed Tunisia a republic. That same day the assembly changed the office of prime minister to that of president.

The white city of Tunis lies on the Bay of Tunis, across which, at sunset, the red flamingoes fly to their homes among the reeds. People of all nations rub shoulders in its streets and boulevards, and the flags of many nations fly upon the ships in the harbor.

In the Perfume Bazaar of Tunis

In Tunis there is a street as fragrant as a flower garden. This is the perfume bazaar, where the scent of thousands of roses is imprisoned in little crystal vials. Each perfumer sits in his little cupboard of a shop, which is raised several feet from the ground, and the air is heavy with the mingled perfumes of orange blossom, attar of roses and verbena.

These sellers of perfumes claim descent from the Moorish aristocrats who were driven from Spain in the fifteenth century. Often their most treasured heirloom is the supposed key of an ancient castle in Spain, which, it is to be feared, is sometimes as legendary as the proverbial ones.

The Arab shopkeeper is a man of leisure. His booth is his bed and there he dozes, drinks coffee and prays occasionally. He seems indifferent to custom and puts more faith in Allah than in



EWING GALLOWAY

DATE PICKERS IN LIBYA, NORTH AFRICA, SCRAMBLE UP THE PALM TRUNKS

Much of Libya is desert country. Along the coast, however, bordering on the Mediterranean, are oases where groves of date palms and olive, orange, lemon and almond trees flourish.



© E. N. A.

THE DATE HARVEST is of great importance to the oasis-dweller, for dates are his chief food and his chief article of commerce while the branches are used for thatching his buildings. The golden-brown fruit, hanging in heavy clusters is cut down in the autumn, and the sorting, storing and packing them keep men, women and children busy for weeks.



WHITE TUNIS—Tunis la Blanche—lies spread out below the muezzin, who, from the gallery of the minaret, turns his face to the east and calls the Faithful to prayer. Tunis is a beautiful city lying beside a shallow lake that is connected by a strait with an inlet of the Mediterranean. The ruins of ancient Carthage lie only a few miles away.



© E. N. A.

IN CONSTANTINE, third city in Algeria, we shall find many wonderful examples of Moorish architecture, but none will please us more than the building that was formerly the palace of the beys of Constantine, with its sunny galleries, graceful arches and colored tiles. This is one of the historic buildings of the old town. Parts of it date from 1232.



BLACK STAR

SNACKS FOR SALE IN THE LITTLE TOWN OF SUK EL GIUMA

The vendor wears what looks like a chef's hat at a rakish tilt; and his service is uncomplicated by knives or forks. Pieces of bread serve instead. Suk el Giuma is in an oasis on the coast of Tripolitania, a part of Libya. Most of the region is desert, which in many places edges on the Mediterranean, so that even along the coast there are oases.

advertising or salesmanship.

Kairawan (or Kairouan), in Tunisia, is considered by Mohammedans to be one of the holiest cities in Africa, being sometimes known as the "African Mecca." It is visited by many pilgrims. Roman cities fell that Kairawan might rise, for, as it was built soon after the Arab conquest, it was largely constructed of pillaged Roman masonry. Cornices from temples to Roman gods are built into the city walls, and some of its foundation stones are the altars where pagan sacrifices were once performed.

Tripolitania, Cyrenaica and part of the Sahara area known as the Fezzan make up the Arab kingdom of Libya. The independent kingdom came into being on December 24, 1951, with the proclamation of the newly chosen king, Idris I. The United Nations had a friendly part in the making of Libya, and several richer, older nations have promised to aid the new

country in its growing years.

The Fezzan, in central and southern Libya, is sparsely settled, with only about 4.3 inhabitants per square mile. The land is largely desert, with few good roads. There are fertile oases, however, where date palms are grown. Transportation is largely by camel caravan.

Cyrenaica, in the northeast, is rapidly becoming modernized, and the people are clamoring for education. Bengasi, chief port, is the seat of the regional government. There is an airfield near by, and short railroads and good highways are centered here.

Archaeologists have uncovered in Cyrenaica a wealth of Greek and Roman remains, buildings, sculptures, ceramics and other ancient treasures.

Tripolitania forms the western portion of Libya. It is largely farming country, where citrus fruits and olive trees flourish, and fields of barley ripen under the



TRANS WORLD AIRLINES

LETTERS WRITTEN AL FRESCO

A familiar street-corner stand in Algeria is that of the letter writer, who, for a fee, will take dictation or will compose for you any sort of missive you desire. Illiteracy among the Moslems is still high, perhaps up to 90 per cent. Comparatively few Moslem children in Algeria go to school.

The picture above was photographed in the city of Constantine.



© LEHNERT & HARDROCK

AT THE JOURNEY'S END both man and beast, though hardened to desert life, are glad to see before them the walls and minarets of a town and to know that soon they will find plenty of water for their refreshment. While the Arab on the left bathes his weary feet, the camels

come to drink, still wearing over their humps the basket "coats" that prevent their backs and sides from being chafed by saddle or pannier. Two of the camels are not yet unloaded. The presence of a horse shows that this city is only on the fringe of the desert.



© E. N. A.

A BEDUIN WOMAN of Tunis admires silver ornaments—earrings, brooches and jeweled necklaces,—and she likes to wear many at one time. Often she wears a large part of her husband's capital, and as his wealth increases so will the number of silver chains, supporting coins or charms, that she fastens to her necklace. Chains may dangle from her brooches as well.

'TWIN THE DESERT AND THE SEA

soft Mediterranean airs.

The capital and chief city is Tripoli, called "the white city" by the Arabs, who built there a number of beautiful, gleaming mosques, a palace for the pasha and other handsome structures. Tripoli was once the center of a great slave trade, and it was one of the chief ports from which the Barbary pirates sailed out to prey on European and American shipping, around 1800, capturing hostages for ransom as well as treasure. United States Marines put an end to those bad old days; and their accomplishment is remembered in the Marine Corps anthem: "From the halls

of Montezuma to the shores of Tripoli."

Tripoli is very close to the desert, and one feels the presence of the immense Sahara, even when wandering through the city streets. From some convenient vantage point we may glimpse a string of camels afar off, bringing loads of ivory or other merchandise to market.

The Arabs who inhabit the desert are from a hardy race of nomads, descendants of the fanatical warriors who overwhelmed Roman Africa centuries ago. They count their wealth in horses, camels and sheep and move from one oasis to another under the guidance of a sheik.

ALGERIA, TUNISIA AND LIBYA: FACTS AND FIGURES

ALGERIA

Country: bounded on north by the Mediterranean; on east by Tunisia and Libya; on south by French Community republics; on west by Morocco and Spanish West Africa. Area, 919,590 sq. mi.; pop., 10,000,000 including over 1,000,000 Europeans. *Government:* under a civil administrator appointed by French Government. All inhabitants are French citizens; they elect 32 senators and 67 deputies to Senate and National Assembly in Paris, and 14,000 municipal councilmen. Officially, Algeria is considered a part of France though the Muslim rebels continued their long struggle for independence on into 1959. Under the De Gaulle Government, however, chances for a peaceful settlement short of complete independence seemed to be improving in 1959. *Commerce and industries:* chiefly agricultural; wine making, livestock raising, fishing, manufacturing. Produces wheat, barley, oats, fruits, olive oil, wool, tobacco, corn; minerals—iron ore, phosphates, barites, zinc ore, lead, coal, petroleum. Exports various agricultural and mineral products; imports farm and other machinery, petroleum, sugar, textiles, foodstuffs, other manufactures. Monetary unit, French franc. *Communications:* railways, 2,725 mi.; roads, 49,700 mi.; over 100 airports; 170,000 motor vehicles; 145,000 telephones; 364,000 radios; TV station at Algiers. *Education and religion:* people mostly Muslims; remainder mainly Roman Catholics and Jews. About 2,200 primary, 80 secondary and 4 higher schools, including the University of Algiers. *Chief cities,* with populations: Algiers, capital, 361,000; Oran, 209,000; Constantine, 149,000; Bône, 114,000.

TUNISIA

Country: bounded on north and east by the Mediterranean; on east and south by Libya; on west by Algeria. Area, 48,332 sq. mi.; pop., 3,783,000. *Government:* an independent nation since 1956; constitution signed in 1959. Formerly a kingdom, Tunisia became a republic in 1957, with a National Assembly and an elected

president. *Commerce and industries:* agriculture, chief occupation; crops include wheat, barley, oats, oranges and olive oil. Sheep and goats furnish meat and dairy products. Forest products include cork, timber and tanner's bark. Minerals are phosphates and iron, lead and zinc ores. Handicrafts are important. Monetary unit, dinar. *Communications:* railways, 1,297 mi.; roads, 9,120 mi.; 53,000 motor vehicles; airports; 103,000 radios; 34,000 telephones; 5 daily newspapers. *Religion and education:* Muslims predominate; most of remainder of people are Roman Catholics. There are about 1,700 primary, 77 secondary, 87 technical and 4 higher schools; a Muslim university in Tunis. *Chief cities,* with populations: Tunis, capital, 410,000; Sfax, 66,000; Sousse, 48,000; Bizerte, 47,000.

LIBYA

Country: bounded on north by the Mediterranean; on east by United Arab Republic (Egypt) and Sudan Republic; on south by French Community republics. Area, 679,358 sq. mi.; pop., 1,136,000. *Government:* a federation of 3 provinces—Tripolitania (746,000), Cyrenaica (291,000), Fezzan (55,000); an independent federal monarchy since 1951, with a king and a two-chamber legislature. *Commerce and industries:* chief crops—dates, olive oil, citrus fruits, grain, esparto (alfa) grass; industries—agriculture, livestock raising, sponge and tuna fishing, tobacco growing and processing. Exports barley, olive oil, esparto grass, scrap metal and livestock. Imports foodstuffs, fuels, tobacco, textiles, metals and various other manufactured goods. Trade largely with Italy. Monetary unit, Libyan pound. *Communications:* caravan routes; roads, including coastal highway, 3,630 mi.; railways, 220 mi.; air service; 8,000 passenger cars; 7,500 telephones; 17,500 radios. *Religion and education:* people mostly Muslims. About 85% illiteracy; 418 primary, 35 secondary, 7 technical, 4 teacher-training and 1 higher school. *Chief cities,* with populations: Tripoli, winter capital, 170,000; Benghazi, summer capital, 71,000.



A CUP at least two thousand years old in the shape of a lotus blossom, engraved with a marsh scene. A faience piece (pottery), it has a deep blue glaze.

METROPOLITAN MUSEUM OF ART,
CARNARVON COLLECTION. GIFT OF
EDWARD S. HARKNESS

Egypt's Relics

...wonders of the past

TO modern archaeologists, Egypt is a vast treasure house of ancient relics. The valley of the Nile was one of the first places the human race settled. Egypt, along with Iraq, boasts the longest history on record of any modern nation. Whole cities, to say nothing of innumerable tablets, tombs and artifacts, have been dug out of Egyptian soil in this century. And the end is not yet in sight. As recently as 1957 the sarcophagus of King Ameni Amu, of the thirteenth dynasty (1785-1647 B.C.), was discovered in a small pyramid. More untapped treasures surely lie below the waterlogged Delta area, waiting for modern science to find a way to reach them.

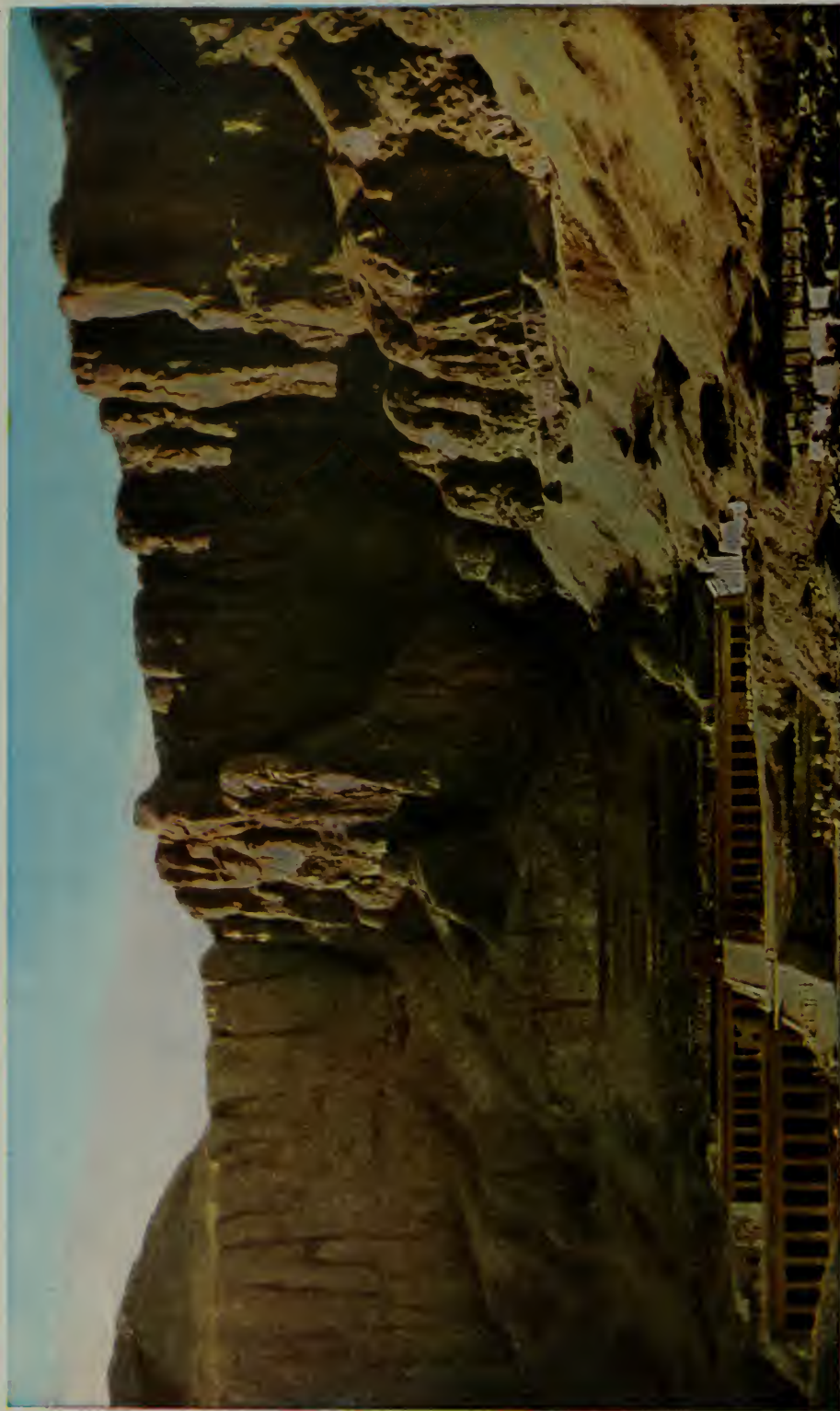
If the UN does not succeed in obtaining the necessary funds, more priceless relics, among them the Temple of Isis, on the island of Philae, and the Temple of Ramses II, at Abu Simbel, may be lost to the Nile waters. These monuments are due to be flooded by 1963 when con-

struction on the gigantic new dam at Aswan reaches a certain point. In 1960 UNESCO, backed by UN Secretary-General Dag Hammarskjöld, launched a world-wide appeal for funds to save the relics. Experts predict that close to \$40,000,000 will be needed to build cofferdams around the monuments against the rising waters.

The long years while the land we now call Egypt was being settled by a succession of wanderers from Africa and western Asia are usually referred to as either the prehistoric or the predynastic period. Modern scholars give different dates for this period but they all agree that settlement of the Nile Valley took a long time—perhaps two thousand years. These settlers laid the foundation for the glorious Egyptian civilization that followed. They cultivated the land, domesticated the animals and learned how to exploit the temperamental Nile. The quality of their flint implements and pottery indicate a civilization equal to that of any other prehistoric people about whom we know. Paintings on vases show that they used boats with oars and even sails, and they cultivated grain.

The earliest known ruler of Egypt was Menes, who is thought to have lived around 3400 B.C. Menes united the two provinces of Lower and Upper Egypt into one nation and established the city of Memphis, where he made his residence. Throughout most of its early existence the land of Egypt had one of the most curious shapes known to recorded history. Ancient Egypt consisted of two narrow strips of fertile land, one on each side of the Nile, beyond which stretched vast deserts. Thus, although it was several hundred miles in length, Egypt was only a few miles in breadth. The prosperity of the land depended, naturally, upon the Nile. Along it ships brought trade to the towns; its annual floods enriched the fields with a coating of mud; from it the villagers obtained water for irrigation—as they still do.

There have been so many Egyptian rulers since the time of Menes that historians divide them into thirty dynasties



FAWCETT

QUEEN HATSHEPSUT built this terraced temple to the god Ammon beneath the cliffs at Deir-el-Bahri. Chapels were dedicated to the goddess Hathor and to Anubis, the god of the dead, and several chambers were also devoted to the worship of Hatshepsut herself. To secure myrrh and

incense for the temple, an expedition was sent by the queen to Punt, "Land of the Gods," which was south of the Sudan and reached to the Red Sea. This was about 3,500 years ago but a carved record of the expedition can still be seen on the temple.



HEWN FROM SOLID ROCK, four immense statues of the Pharaoh Rameses II of Egypt stand outside the temple of the Rising Sun at Abu-Simbel, two on each side of the entrance. Here we see an Arab standing on the lap of one of these enormous figures. He seems an insignificant dwarf, indeed, compared with the statue of the long-dead ruler.

EGYPT'S WONDERS OF THE PAST

in each of which reigned many kings, known as Pharaohs. The names of these have been gleaned from tablets and papyri, for early Egyptians inscribed their deeds by means of pictures and marks which learned men have deciphered for us. This was the earliest form of writing.

Outstanding among the Pharaohs was Khufu, or Cheops, who organized the government so that the country was ready for the greatest period of its history. He built the Great Pyramid in 2900 B.C. and it far excels anything that has been constructed even to this day, but we shall read of that in the chapter on the Sphinx and the Pyramid.

At the height of its power, about 1560 B.C., ancient Egypt was an empire comprising not only the Nile Valley but Palestine and the greater part of Syria. Thothmes III was ruling then with the assistance of his step-mother, Hatshepsut, who seems to have been a very able woman and was undoubtedly the first

feminist. She is often referred to as the "Queen Elizabeth of Egypt." Thothmes III, possibly the greatest ruler in Egyptian history, led his army in seventeen campaigns against the Syrians, crossed the Euphrates and received gifts from the Hittites in Asia Minor and from the king of Babylon. During his reign, the peoples of Punt and Ethiopia, just south of Egypt, acknowledged its supremacy and sent enormous quantities of ivory, gold and spices to its temples and courts. Ships and caravans traded with Babylon, Crete, Greece and various Syrian towns. Records of all these activities were chronicled on the walls of the great temple at Karnak.

Of the same dynasty but living a hundred and sixty years later was Amenhotep III, who is known as a great builder. The magnificent temple at Luxor, temple pylons and whole avenues of sculptured rams, though damaged by time, are still viewed by thousands of tourists each



TRANS WORLD AIRLINES

THE COURT OF RAMESES II WITHIN THE RUINS OF LUXOR TEMPLE

The most famous ruin in Luxor is the temple, its sculpture still noble though battered by time. Built by Amenhotep III of the eighteenth dynasty, it occupies the site of an older sanctuary.

EGYPT'S WONDERS OF THE PAST

year. Cuneiform tablets of this period show that he carried on quite a correspondence with the king of Babylon and other monarchs in far-away lands.

His son, Amenhotep IV, stands out because he was a religious fanatic. Casting aside all deities, including Ammon and many others whom they worshiped and in whose honor they had built and decorated these vast temples, he forced the people to worship a universal god "Aten" who represented the sun-disk. He even changed his name to Akhenaten which means "pious to Aten." While he was so busy with religious reforms, however, his country was having political troubles and he lost Syria and other territory in outlying districts. Although his son-in-law, Tutankhamen, restored

Ammon and the former deities to their places as the objects of worship, he did nothing to get back the lost territory, and it was not until the next dynasty, about 1240 B.C., that Seti I and his son, Rameses II, regained it. Rameses II is supposed to have been the oppressor of the children of Israel who, we remember from the Bible, came to Egypt because of a famine in the land of Canaan. So prosperous did they become that the Pharaoh made it very hard for them and they finally went back to their own land. Rameses II may not have treated the Jewish tribes justly but he did a great deal for Egypt. Following his reign, however, there was a long period of decline and the country finally fell to the Persians who were themselves driven out by the Greeks in 332 B.C. under the generalship of Alexander the Great, famous king and conqueror.



TRANS WORLD AIRLINES

IN THE TOMB OF KING TUTANKHAMEN

At lower left can be seen the beautiful head of the richly ornamented golden coffin, the innermost of three, in which the boy king of the second millenium B.C. was entombed. The coffin was made in human shape and his face was painted upon it.

When, after Alexander's death, his dominions were divided up, Egypt fell to Ptolemy, his lieutenant, who founded a dynasty by that name which lasted about three hundred years. The last of his line was the famous Cleopatra, who killed herself by means of a poisonous snake, and her empire fell to the Romans.

But let us pay a visit to some of the ruins of ancient magnificence. Perhaps the most wonderful are the Pyramids and Sphinx, but we shall leave them for the time being and go on, not so very far, to the site of the ancient city of Memphis, the royal capital of Egypt five thousand years ago. Nothing remains to-day of this city, formerly so great, but the ruins of temples, palaces and dwelling-houses. Even the gigantic statues of the Pharaoh Rameses II, that once stood here, have fallen to the ground.



METROPOLITAN MUSEUM, N. Y.

THIS STATUE OF TUTANKHAMEN, one of the two that stood in the ante-chamber of his tomb, like sentinels guarding the dead, is of carved wood, splendidly adorned with a head-dress and ornaments of beaten gold. It is seven feet in height, and the head-dress has the upraised serpent, the sign of loyalty. King Tutankhamen lived over 3000 years ago.



METROPOLITAN MUSEUM, N. Y.

ROYAL TREASURE, including gold-plated furniture and rich gifts to the dead king, surround this statue of Tutankhamen, which is shown also on the opposite page. Here we see a beautifully decorated clothes chest, alabaster vases that once held spices and the remains of bunches of flowers. These were believed to be used by the dead in the other world.



EWING GALLOWAY

MANY OF THE PHARAOHS had a part in building the great temple of Ammon at Karnak. The massive, figured columns are one of the chief wonders of ancient Egyptian architecture.

EGYPT'S WONDERS OF THE PAST

More interesting is Tell-el-Amarna, a town founded in 1340 B.C. by Pharaoh Akhenaten, the father-in-law of Tut-ankhamen. Here we can pace the ancient streets and alleys, and visit the palaces and mansions of the king and his great men. A few exquisitely beautiful paintings and sculptures remind us of past glories.

When we inspect the dilapidated little houses in the workmen's quarter we can easily imagine how the poor folk lived in the days of Akhenaten. Some of their food-bowls and water-jars are still in a perfect state of preservation and could well be used to-day. The Pharaoh himself had a wonderful pleasure palace with gardens, an artificial lake and many pools.

The Egyptians were famous for the immense size of most of their important temples and monuments, as well as for the magnificence of the decorations that they lavished on them. Let us go to Dendera and visit the huge temple of the goddess Hathor. This was built in comparatively modern times—about the beginning of the Christian era. The pillars of the temple, all of them covered with carvings and richly painted, are about forty feet high. On the outer walls is a figure of Cleopatra, one of the most famous queens in the world's history, that is almost three times the height of an ordinary man. The greatest pains were taken to make the temple beautiful, and although it is now in ruins, it has not entirely lost its magnificence.



TRANS WORLD AIRLINES

THE GLORY THAT WAS ANCIENT EGYPT

In the ruins of the great temple at Karnak, tall pillars bear the sculptured lotus and papyrus. The lotus pillar (foreground) was a symbol of Upper Egypt; the papyrus, of Lower Egypt. The lotus, a water-lily, was known as the sacred lily of the Nile.

Traveling up the Nile from Dendera, we presently arrive at Thebes. We shall not, for the moment, visit the city itself but the temples, and especially those of Karnak and Luxor. Among them all, the temple of Ammon first claims our attention, since it is the largest and one of the most splendid. Almost four hundred years were spent in building it; and as we look at the huge pillars in its famous Hypostyle Hall, at the enormous blocks of stone of which its walls and towers are built and at its gigantic statues, we wonder



METROPOLITAN MUSEUM, N. Y.

ALABASTER VASES were among the many priceless treasures found in the tomb of Tutankhamen, who died about 1350 B. C. Their exquisite shapes and decorations show how artistic were the craftsmen of Egypt in those ancient days. The fragrance of the perfumed ointments that these vases contained was still perceptible when they were discovered in 1922-23.



METROPOLITAN MUSEUM, N. Y.

BESIDE THIS SHRINE, which was placed in the ante-chamber of Tutankhamen's tomb, stands a wooden ushabti figure. On it is painted a charm to ensure that its soul shall obey the dead king in the other world. The shrine is covered with heavy sheets of gold, and on its doors, here shown open, are depicted incidents in the lives of Tutankhamen and his wife.



THE TEMPLE TO THE GODDESS HATHOR, BUILT BY THE PTOLEMIES

Dendera on the Nile has one of the finest of Egyptian relics, the Hathor temple. The twenty-four columns, six across and four deep, are fifty feet high and seven feet in diameter.



PHOTOS, EWING GALLOWAY

HIEROGLYPHICS AND BAS RELIEFS COVER THE GIGANTIC REAR WALL

Figures and inscriptions narrate the stories and rituals connected with Hathor, the Venus of Egypt. They also tell something of the history of Cleopatra and the Ptolemies.



EWING GALLOWAY

A CROWNED BIRD IN STONE BY THE TEMPLE OF EDFU, DEDICATED TO HORUS

The hawk, or falcon, symbolized Horus. Sometimes he was shown as having a man's body and a hawk's head. Carvings such as those in the background decorated the temple walls.



METROPOLITAN MUSEUM, N. Y.

THIS STRIKING CREATURE, with a long, slender body and legs like those of a cat, is one of the twin supports of the couch of King Tutankhamen, that was found in his tomb in the Valley of the Kings, a valley of rock-cut tombs, among the Theban Hills. The monster is made of wood, richly gilded, and its gleaming teeth and long, pink tongue are of ivory.



METROPOLITAN MUSEUM, N. Y.

TWO WOODEN HANDMAIDENS, half life-size and beautifully carved, were found in the tomb of Mehenkwtetre, a nobleman who lived about 2000 B. C. Models of servants were placed in the tombs of nobles and were called Ushabtis, or "Answerers," since their spirits were supposed to wait upon the nobles' spirits in the other world. They carry food in the baskets.

how it came to be built in an age long before cranes and other mechanical devices were known. Especially do we marvel at the genius of the ancient architects under whose care it was built, and at the patience and skill of the artists who adorned it with their carvings.

Very wonderful too are the temple of the moon-god, Khensu, the temple of Rameses III, in which the pillars are carved to represent the god Osiris and the long avenues with rows of sculptured sphinxes on each side of them, that lead to the various temples. We must not miss the temple of Amenhotep III, however, for it is very splendid. Its doorways were in his time studded with gold, and the forecourt, which was built by Amenhotep, was paved with silver. Round this court are seventy-four columns, each in the form of a papyrus-bud.

Where the Pharaohs Were Buried

Beyond the Theban temples we see a line of bleak hills against the deep blue of the sky. In them is the desolate Valley of the Kings, which contains the burial-places of many of the great Egyptian Pharaohs. They were hidden here so that their bodies might not be disturbed by thieves in search of the gold and jewels that were buried with them. In this valley was found, in 1922, the tomb of the young King Tutankhamen, with all his treasures, but he was a very unimportant monarch compared with some of the others who were buried near by.

The graves of mighty Rameses II, of Amenhotep III, of Thothmes III and many another ruler of Egypt have all been discovered here. Some of the tombs are marvelously decorated, and from the pictures and carvings in them we may learn much about the ancient Egyptians. Others have contained articles of furniture and personal belongings of the dead kings, and from these also the story of the past can be read.

Embalming the Royal Bodies

The bodies of the kings as well as of all who could afford it were prepared for burial by a long and costly process. Em-

balmed first, the body was then wrapped tightly in fold after fold of linen which had been soaked in some kind of preservative and placed in a coffin made in the likeness of the person it contained. This statue-coffin was placed in still another coffin of stone or wood. Thus, the remains and all its possessions awaited the day when the immortal soul should return. In the Museum of Antiquities at Cairo, the mummies of some of the famous Egyptian kings are on view, while in our own museums we may see the mummies of less important persons. All this has served to make the Egypt of the past very real to us to-day.

There are many other temples and monuments in different parts of Egypt that we might visit, but we shall leave the lifeless statues and great empty buildings and turn to the people who erected them.

Let us imagine ourselves in Egypt about 1240 B.C., in the days of the great Pharaoh Rameses II. We are at Memphis, but we wish to visit friends at Thebes, and so hire a boat in which to travel up the Nile. Our voyage will be extremely comfortable, since our deck-cabin is not too small and is very airy and handsomely furnished. We embark. Luggage and stores are all aboard. The rowers bend to their oars and we begin to glide placidly up the river. Day after day we proceed, sitting when it is not too hot on the high platforms at the bow and the stern to watch all that happens on the banks. Sometimes a breeze springs up and the gaily-colored sails are hoisted.

We Are Welcomed by the Merchant

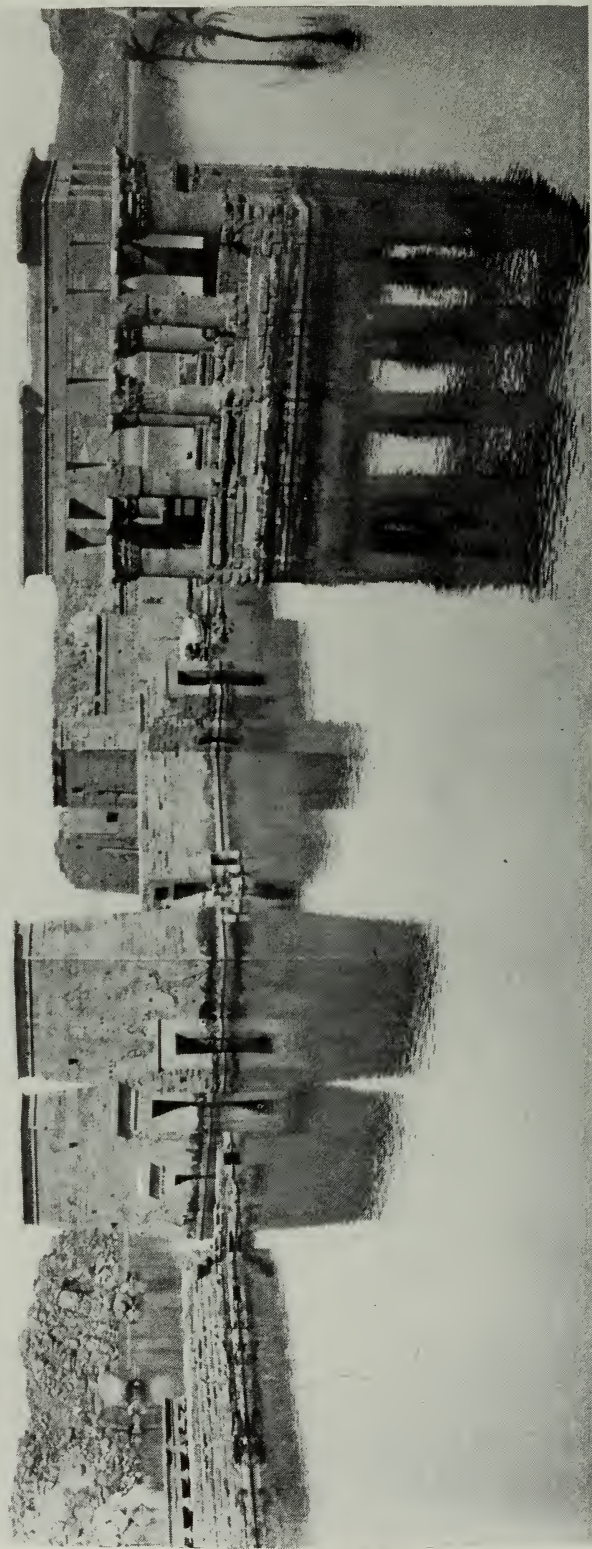
At last we see Thebes, the most magnificent city in all Egypt, and the temples of Karnak and Luxor with three bare grim hills beyond them. Our boat is moored to the stone-paved quay, and we go ashore to meet our friends. One of them, a merchant, comes forward to greet us. He is bareheaded in spite of the hot sun, wears a linen robe with a long skirt and carries a stout cane.

He limps a little, since his laced leather shoes are new and tight. His wife, our friend explains, is looking forward



MC LEISH

THIS SCULPTURED ARCH of Ptolemy III, at Karnak, stands on the site of ancient Thebes. It is in the avenue that leads to the temple of Khensu, the god of the moon. The arch has carved reliefs showing Ptolemy III, a warrior king of Egypt who lived in the third century B. C., offering sacrifices to the gods of Thebes. The architecture is typical.



EWING GALLOWAY

TEMPLE OF ISIS AND PAVILION KNOWN AS "PHARAOH'S BED" ON THE SUBMERGED ISLAND OF PHILAE

When the Nile was dammed at Assuan, the island of Philae was submerged. At times even the buildings are completely under water, including the two cut-off pyramids (left) forming the entrance to the temple of Isis, and the pillared pavilion (right), never completed by its builders of old.

eagerly to our visit, but she is at present at her jeweler's waiting while he makes a bracelet for her from a bar of gold that she was given that morning. Our other friend, a captain of the Libyan soldiers, would also have been on the quay to meet us had he not been obliged to investigate a case of theft, for his detachment acts as a police force in the workmen's district. The merchant suggests that we should go to this district on our way to his home on the chance of seeing the captain.

In the Streets of Thebes 1240 B.C.

The streets are narrow and the little houses of sun-baked mud are mainly of one story although some have two. Since very few of the doors are closed we can easily look inside. There is little furniture to be seen—palm-leaf mats that serve as beds and couches, some earthenware dishes and jars containing water and oil and a small image of a god are usually all that a workman's family possesses. Sometimes there are also two or three wooden chests, and in some of the two-story houses a room on the ground floor serves as a stable for a donkey.

Scantly dressed children swarm everywhere, and in most of the houses we see women busy at household tasks. Here is one grinding corn; there one is baking bread, the chief food of the poorer people. Another, helped by a neighbor, weaves cloth at a rough loom. We see very few men, however. Most of them went to work at sunrise taking with them their dinner—bread soaked in oil and some fruit—and will not return home till sunset.

We see some of them at work as we draw near to the market. The clang of hammers attracts our attention to a metal-worker's shed. Two brawny fellows are fashioning harness for a pair of chariot horses. Our friend speaks to a carpenter who is making some very handsome chairs for him. When we resume our walk he tells us not to go too near a certain booth. It is the workshop of a dyer, he explains and adds, quoting from an Egyptian poem, that the dyes are "evil-smelling as bad fish." We hear the tramp of a party

of men, and our other friend, the captain of Libyans, appears with a file of his soldiers.

Negro Soldiers and Sailors

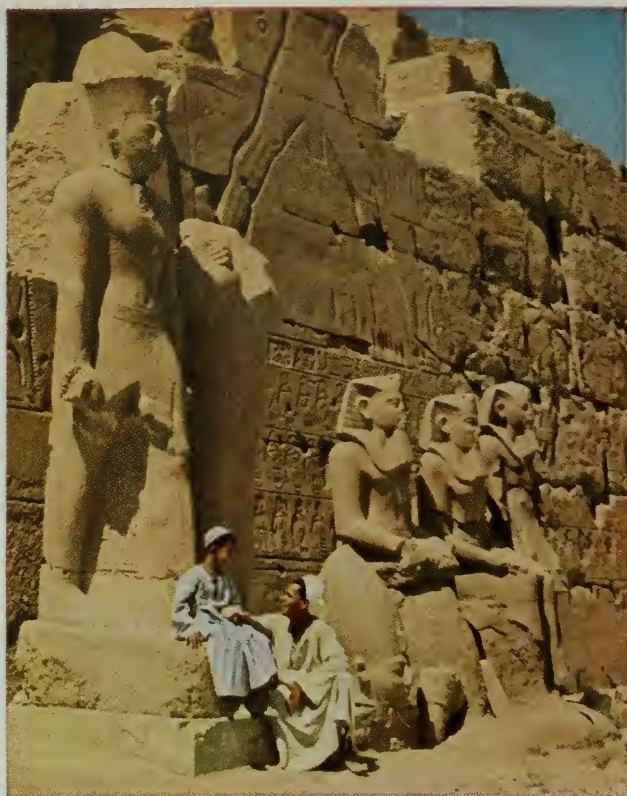
In front of the line is a trumpeter and behind him a dozen infantrymen carrying light shields and axes and with spears sloped over their right shoulders. They wear felt caps and waist-cloths, but no armor, and are a very well-disciplined body of men. Behind comes the captain, unarmed though he carries a decorated baton of command. He is an Egyptian, appointed to the Libyan legion by Pharaoh, but the soldiers are Negroes.

As we pass through the market, let us look at the crowds around us. There are artisans, dressed only in waist-cloths, with their wives, who wear simple smocks. Clerks and priests in short kilts pass by, and smart merchants like our friend. Sellers of perfumes and roast meats, bakers, shoemakers and toy-makers urge us to inspect their wares. A barber wishes to shave us. The slave attached to a little restaurant suggests that we should have our evening meal there.

Marketing without Money

Our friend waves them all away, but wishing to buy us a present, stops at a perfume stall. Several little jars of scent are shown to us and we smell them, finally choosing two. Our friend takes another and offers the saleswoman a small block of gold for them. She declares that it is not enough. After a quarter of an hour's bargaining she accepts the merchant's offer and tells us that she is extremely pleased to be paid in gold, since that morning she has taken a pearl necklace, a silver bracelet and a fan set with gems in exchange for perfumes. Our friend explains as we stroll away that this system of barter is the custom.

Presently we arrive at his house. It is quite an imposing mansion of three stories and has a large courtyard surrounded by a high wall. The large windows of the two upper stories overlook the street. Within we find magnificent furniture—chairs, carved and gilded, chests with little



EWING KRAININ

GAZING into eternity, the stone figures still watch over the ruins at Karnak, a part of ancient Thebes. Around 2000 B.C., the city had both worldly and spiritual power, with endless temples.

THE COLOSSI OF MEMNON actually represent Amenhotep III and once stood at either side of a now vanished temple built by him on the plains of Thebes. An earthquake shattered the near figure.

CHARLES D'EMERY—MANUGIAN STUDIOS



A FAINT SMILE seems to animate a huge statue on the temple at Medinet Habu, on the west bank of the Nile at Thebes. The Greek poet Homer called the city "hundred-gated Thebes"—not because it was walled but because of the gateways in the myriad temple enclosures.



pictures painted on them, and rich hangings. The walls are painted with figures of gods and scenes of everyday life.

The food that we are offered is excellent. We have roast meats in abundance, baked fish, stuffed duck and pickled fowl, fruit, bread and cakes. While we eat we hear news of the merchant's two eldest sons. One is an officer in the celebrated legion of Ammon—all the regiments are named after gods. He is going to take us to hunt wild fowl the next day on the estate of a noble. The other son is a scribe. This profession, it appears, becomes less and less confined to the middle classes for many of the working classes are educating their sons to become scribes.

When we retire for the night we find that we are to sleep on a mattress on the floor. Instead of having a pillow, we rest our necks on curved wooden supports. Everything is very clean, and the breezes that blow through our windows are cool and laden with the scent of flowers.

A Day of Hunting and Fishing

We go to the nobleman's estate the next day and, embarking on wooden canoes, proceed to a near-by marsh. We find plenty of wild fowl among the reeds, and our host soon kills three ducks with boomerangs. He has a pair of trained cats to retrieve the game for him. While he is throwing the boomerangs, slaves in two other canoes lower a net. This is soon drawn up filled with fish.

We dine with the noble and, while we eat, minstrels play on harps. Our host is a widely traveled man. As an army officer he has accompanied his regiment to Palestine and led a charge against the Hittites in his chariot. On another occasion he sailed down the Red Sea to Punt, on the East African coast, to obtain spices and gold for the Temple of Ammon. He is also well educated and in his library has books of tales and poetry, works on medicine and mathematics, all written on rolls of papyrus—sedge which was pressed to provide a flat writing surface.

By far the most interesting part of his life, so the noble tells us, was the period

when he was at court in attendance upon the Pharaoh Rameses II. He describes an audience to us. The monarch, seated on his golden throne, wore a double crown, to show that he was king both of Lower and Upper Egypt. On his forehead was the royal golden cobra, the uræus. Near him was his eldest son Khamuast, an able statesman, a priest, and, so it is said, a great magician. His Majesty's Libyan guards, armed with their double-edged swords, were posted about the palace.

Attending the Great Pharaoh

A messenger from Palestine arrived and was admitted to the audience chamber. He and the councilors assumed attitudes of worship when they came into the king's presence since they regarded him as the descendant of a god and himself a demigod. Kneeling, with their faces close to the floor, they gave him their news and heard his answer. Another messenger came to tell Rameses that there was a famine in some distant province; yet another brought word of a convoy of gold that was on its way from Ethiopia.

We ask the noble to tell us more of Rameses II and he agrees willingly. Rameses, while still a boy, had been associated with his father Seti I in the government of Egypt. When only ten years old, he was sent to the wars in Syria and a little later went to subdue the turbulent tribes of the lands watered by the upper Nile. This he did successfully. Rameses was a great warrior and after he became Pharaoh led an army against the Hittites in Syria. The chariots were under his own command, and by his bravery he succeeded in turning the battle of Kadesh from a defeat into a victory.

Prosperous Reign of Rameses II

Much of his vast wealth was spent on building operations. As well as raising huge temples, he had the irrigation canals of the Nile delta repaired and extended and established caravan stations along the route to Ethiopia. Rameses was one of the greatest of the Pharaohs. Egypt was peaceable under him; the people were prosperous and the police efficient.

The Sphinx and the Pyramids

... monuments

of bygone ages

THE Great Sphinx and the Great Pyramid of Giza were built thousands of years ago. At the height of their fame, they were the marvel of civilization; the Great Pyramid was one of the Seven Wonders of the World. Today these magnificent structures are battered and broken from the incessant pounding of wind and sand. Giza, the nearest town, is practically an unofficial suburb of Cairo and is increasing in both size and importance. The Pyramids and Sphinx attract visitors from all over the world, and they fill Egyptians with pride. One of modern Egypt's leading archaeologists recently referred to the Sphinx as "the world's most wonderful statue."

Giza is not alone in its good fortune, of course. There are many other sphinxes and pyramids in Egypt—and, indeed, scattered throughout the world. The very word "sphinx" is Greek, originally mean-

ing "throttler." It was used to designate a terrible being that boasted the head of a woman, the body of a lion and wings. According to ancient legend, she originally lived in Africa, but was sent by the gods to the city of Thebes in ancient Greece to punish the sins of a Theban ruler. Taking a rock near the city for her abode, she asked every passer-by a riddle. "What walks on four legs in the morning," she would demand, "on two at noon and on three in the evening?"

All who could not guess were devoured, and everyone failed until Oedipus came. He was able to tell the Sphinx that the answer was, "A man": because, as a baby, he crawls on hands and knees, in the prime of life he walks upright, and when old age makes him feeble he can progress only with the help of a stick or crutch. Since her riddle had been solved, the Sphinx threw herself from her rock and the Thebans were never troubled by her again. The riddle and the myth, however, have lived on in folklore.

Thus we see that the Greeks believed their Sphinx to be an evil monster preying upon mankind. When they came to Egypt and there saw huge carved figures that were half-beast and half-human, they called these sphinxes too. To the Egyptians, though, they were more generally accepted as symbols of the grandeur and power of the Pharaohs. Their most notable characteristic was their superhuman dignity. Their bodies, made like those of lions, represent might and nobility, and their heads are usually portraits of ancient kings. Sometimes, instead of having a man's head, an Egyptian sphinx has that of a ram like those at Karnak. In other cases the head is that of a hawk. To the Egyptian this did not detract from their dignity for a ram was emblematic of the great god Ammon, whom they worshiped, and a hawk was symbolic of the king as a warrior.

It might be asked here: What is a sphinx, since it had all these forms? It is partly beast and partly human. A sphinx usually has a lion's or lioness's body along with a head that represents a man, woman or god. Whatever other character-



MAYNARD WILLIAMS FROM SHOSTAL

A ROMAN PILLAR overtops a time-battered sphinx, in Alexandria. Here ancient Egypt and the Greek-Roman world once met and mingled.

MONUMENTAL RIDDLE—the famous Sphinx at Giza, near Cairo, sadly chipped by five thousand years of blowing sand. Originally called Hor, for an eaglelike god, it was given the name of Sphinx by the Greeks, from one of their myths.

ROBERT O. BOOTHE FROM SHOSTAL





MAYNARD WILLIAMS FROM SHOSTAL

THE GREAT PYRAMID of Cheops, of Khufu, at Giza, built about 2900 B.C. The tremendous pile of stone blocks is 756 feet square at the base. Once it rose to a height of 481 feet though today it is only 450 feet high. There are several chambers and a tomb below.



J. BARNELL

IN A ROW—the three pyramids at Giza, from left to right: Cheops, the largest, same as above; Khafra (or Kephren) built in 2650 B.C.; and Mankara, built in 2600 B.C.



METROPOLITAN MUSEUM OF ART

A GREEK SPHINX of the sixth century B.C. Unlike the wingless, male sphinx of Egypt, that of the Greeks had wings and a woman's head. The idea of the "riddle of the sphinx" comes from Greek myth. She held the Thebans in thrall and destroyed those who could not answer her riddle. When Oedipus solved it, she threw herself from a rock and Thebes was freed.

istics they may have are purely incidental. So the kneeling rams found in Egypt are not usually considered true sphinxes, although in appearance the rams are closely similar.

The great Sphinx at Giza, which has been mentioned already, is the most celebrated of its kind. For centuries it has been considered a thing of awesome mystery. It is supposed that the work was

meant to represent Horus (the god of day, usually shown with the head of a hawk). Except for the paws, the great Sphinx is carved out of one block of stone. Probably it was made some time before 2700 B.C. In spite of the abrasive effect of blowing sand and other ravages of time, the Sphinx is still extremely impressive.

At Karnak we may see long avenues



METROPOLITAN MUSEUM OF ART

THE SPHINX IS A SYMBOL OF KINGLY POWER

A true sphinx, with the body of a lion and the head of a Pharaoh, was, in the ancient myths of the Egyptians, a symbol of the sun god with whom the Pharaoh was identified. These figures were placed at the entrance of the temples. The sphinx shown here has the conventional lion body and the head of King Sesostris III, of the 12th Egyptian dynasty, 2000-1788 B.C.



OTTO DONE FROM SHOSTAL

THE PYRAMID OF THE SUN at Teotihuacan, twenty-five miles northeast of Mexico City. Teotihuacan was the sacred city of the Toltecs, who occupied the region before the Aztecs. Though not so high as the Egyptian pyramids, the Toltec one covers almost as large an area, 761 feet by 721 feet at the base. A step pyramid, it has a wide stairway that leads to a shrine and place of sacrifice at the top.



EGYPTIAN STATE TOURIST ADMINISTRATION

THE OLDEST STONE PYRAMID KNOWN is at Sakkara, a “city of the dead” in Egypt. It was built for the Pharaoh Zoser, about 3000 B.C., by one of the few ancient architects on record, Imhotep.



F. MARTINEZ-REPETTO FROM SHOSTAL

EL CASTILLO, a pyramid temple probably dating from the sixth century, lies in the jungle of northern Yucatan, at the ruined city of Chichen Itza, Mexico.



EGYPTIAN STATE TOURIST ADMINISTRATION

ROWS OF SPHINXES line the approach to the great temple of Ammon at Karnak. The whole avenue is two hundred feet long. Though the true Egyptian sphinx was a crouching lion with a man's head, these have the heads of rams. The horned animal was sacred to Ammon. Some few sphinxes have the heads of hawks.

lined with sphinxes. Some, as we have already said, have the heads of rams; others are like representations in miniature of the sphinx at Gizeh. All are wonderfully wrought. Splendid indeed must have been the effect when the rows were complete and the shapely figures were yet unspoiled by weather and hard treatment. One of the most beautiful sphinxes ever discovered is that which stands on the site of the old city of Memphis. It is of alabaster and is extraordinarily well preserved, so that we may study the grace of its lines and the serene and kingly expression on its face.

Sphinxes of Other Lands

The ancient Assyrians also had sphinxes, but like the Greeks represented them as having wings and considered them to be demons. Although they have lions' bodies, these creatures are far from being noble or stately. Their faces are incredibly foolish for they have great staring eyes and are usually smirking. Those of the Hittites, who lived in Asia Minor, are more ferocious in appearance but are stiff and conventional. Some have two heads, and they resemble an ordinary lion to which a human head has been given in addition to its own.

In Central America, among the carvings of the ancient Maya peoples, are some monsters that are not unlike sphinxes. We see, therefore, in how many different lands the conception of this strange type of imaginary creature met with acceptance.

Let us now turn to the Pyramids. Pyramids were usually erected to glorify the dead. In prehistoric times, the people undoubtedly marked the graves of their dead with poles and brushwood and possibly a covering of loose stones. Later, these rude constructions developed into the Pyramids, which were elaborate monuments built over burial places. In the majority of cases, the bodies were placed deep in the earth beneath them and not in the heart of the structure as one might suppose. Some of the chambers above were used as a storehouse for things the deceased might need hereafter.

The Famous Pyramids of Egypt

The Egyptian pyramids are the most famous. They were the tombs of kings and sometimes of queens and other important persons. Most have the perfect, symmetrical form of those at Gizeh. In others we see a series of great "steps" ascending to the summit. This type is constructed of several lofty tiers of masonry, each of which is smaller than the one immediately below it. The most interesting example is the pyramid of King Zoser at Sakkara, which is especially worthy of note, because it is probably the earliest that still survives. It is about five thousand years old. Another very ancient tomb, the pyramid of Sneferu at Medum, is constructed on a somewhat similar plan, with several tiers.

The pyramids were usually of stone, though a few built of bricks are still to be seen. These are generally of comparatively recent date and, like that at Dashur, are in a ruinous condition. The sizes of the pyramids vary. There are examples small enough to be almost insignificant, and there are immense structures like those at Gizeh.

Everyone has heard of these three wonderful monuments, and an infinite variety of fantastic theories as to their purpose has been advanced. Actually, however, the smallest is the burial place of King Menkaura, the medium-sized one that of King Khafra and the largest that of King Khufu. The smallest is also the most modern, but it is nearly five thousand years old.

Within the Great Pyramid

Let us visit the pyramid of Khufu—the Great Pyramid, as it is called to distinguish it from its neighbors. Although from a distance its sides appear even and unbroken, when we approach it we see that it is composed of vast blocks of stone, most of them higher than a man and some weighing many tons. Imagine the work it must have been to bring over two million blocks by boat across the Nile, then to have transported them, probably along greased roads, and to have placed



AN ALABASTER SPHINX, almost perfectly preserved, was discovered in 1912 on the site of the ancient city of Memphis. It was probably carved about 1240 B.C. during the reign of Rameses II. The sphinxes were given their name by the Greeks, quite incorrectly as it happens for the Greek sphinx is a demon and not, like the Egyptian, an emblem of majesty.



EGYPTIAN STATE TOURIST ADMINISTRATION

THAT OF MANKARA (or Menkaure) is the smallest and latest of the three great pyramids at Giza. All were built of huge blocks of yellow limestone, and originally were cased in finer, white limestone. Beside each pharaoh's tomb is the little pyramid of his queen.

them in position by means of pulleys and ropes. And so accurately was it done that the base lacks but a fraction of an inch of being a perfect square. Such was the engineering skill of the early Egyptians. Each of its sides measures 756 feet, and its height is 450 feet. But these bare measurements give little idea of its majesty—it is one of the most magnificent tombs in the world.

Where the King Was Buried

Now, as has been stated, the burial chamber was usually underground, beneath the pyramid. There is such an apartment below the great pyramid, but it is unfinished, and the real burial place is within the colossal mass of masonry. If we enter the passage that opens upon the north face of the pyramid, we ascend for some distance before we come to the grand gallery, from which, turning southward, we can reach the so-called queen's chamber. If instead we continue to climb, however, we reach an antechamber and then the king's chamber.

In it is a huge empty sarcophagus, carved from a solid block of granite. In-

deed, one of the few disappointing features of the great pyramid is the fact that it contains so little. It was entered ages ago by tomb robbers. The king's chamber is ventilated by channels leading to the open air.

Other ancient peoples must have been impressed with the desirability of pyramids as tombs. In Sudan, small varieties are found, while in Algeria there are large tombs that have obviously been evolved from Egyptian pyramids.

Pyramid of the Sun

In America there are also many pyramids, but these were constructed for entirely different purposes. The Mayas set temples upon them, and thus gave an appearance of importance and stateliness to their religious buildings. In Mexico there is one massive structure, the pyramid of the Sun, at Teotihuacan, that almost equals those of Egypt in size. It is built of adobe and is faced with stone and stucco. There are also many that are smaller, but very elaborately finished. All are more squat than the Egyptian pyramids and have steps to their summits.

THE TURBINES on the left are part of a new hydroelectric plant opened at the old Aswan Dam in 1960. The plant is a step forward in a long-range program of power and flood-control development, which includes the Aswan High Dam. This is being built four miles upstream and is scheduled for completion by 1970.

Egypt

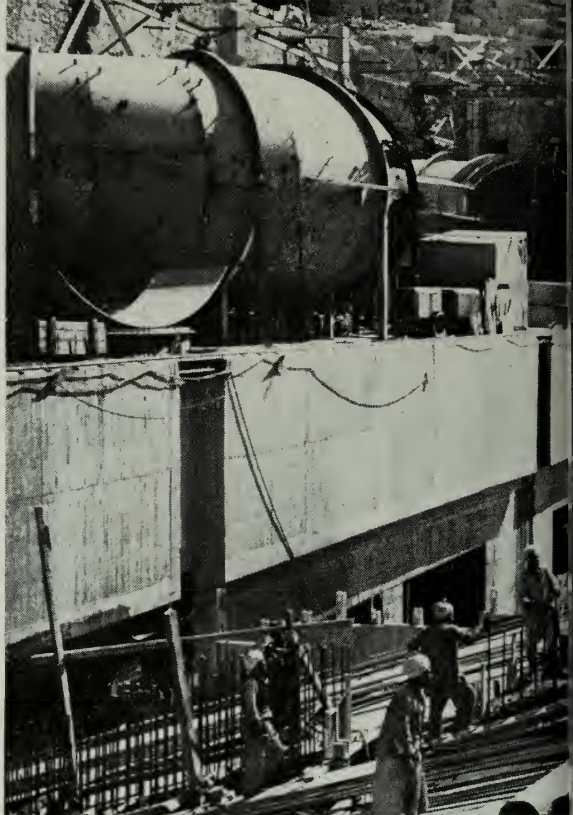
*... region of the
United Arab
Republic*

HERODOTUS, the Greek historian who lived in the fifth century B.C., called ancient Egypt the "gift of the Nile." The Nile is still important to Egypt, to be sure. The Government has invested literally the nation's whole future in the enormously expensive dam project to be located near Aswan, in southern Egypt. The Aswan High Dam is scheduled to be completed in 1970. It will bring Nile waters to millions of parched Egyptian acres. Yet it is not wide of the mark to call modern Egypt's new prestige and stability the gift of another body of water—the Suez Canal.

The important role the canal was to play in the development of the new Egypt began in July of 1956. That month, the United States suddenly withdrew its offer to help build the Aswan High Dam. (Another dam already exists nearby.) The United Kingdom and the World Bank, which had also made offers, followed suit. These rejections put Egyptian President Gamal Abdel Nasser in an uncomfortable position. He feared that

his enemies at home would reap great profit from these stunning blows to his prestige. Moreover, Egypt was badly in debt and incapable, on its own, of even *beginning* the Aswan project.

In the midst of his quandary, Nasser resorted to bold action. He nationalized the Suez Canal. It had been built in the nineteenth century and thereafter operated by a European company, largely British and French. It was and is an important passageway for trade. It provides a short cut into the Mediterranean for ships coming up the Red Sea from Africa and Asia. At the time of Egypt's seizure, the canal was earning about \$100,000,000 per year. Nasser proposed to use this revenue to begin the Aswan project. But the nationalization of the canal had implications far beyond the merely financial one, as Nasser well knew. It symbolized to Arabs everywhere the assertion of national sovereignty against Western "imperialism." The British, on the other hand, feared that if Nasser's action were allowed to stand, not only their





RENÉ BURRI, MAGNUM

prestige but their entire defense position in the Middle East would be endangered. The French, already angered by Nasser's encouragement of anti-French riots in Algeria, shared Britain's view. The crisis alarmed the entire Western world. By the fall of 1956, plainly, Nasser was in trouble. Meanwhile, support for Nasser as spokesman for the whole Arab world had decreased.

When Israeli troops suddenly invaded Egypt's Sinai Peninsula in late October, however, they set in motion a series of events that were to make Egypt's President an Arab hero almost overnight. Britain and France joined the attack two days later on the grounds that the canal had to be protected and the peace maintained. These two foreign invasions set Nasser on his feet—rallying his countrymen, the Arab League and the Soviet Union behind him. He made fiery radio speeches, vowing that Egypt would “never surrender,” no matter what the odds. When hailed in the streets of Cairo he declared: “Citizens, we pray that God may

forbid any other flag to fly over our land.” The United States joined in opposition to the action taken by its old allies. Within a few weeks the UN forced the Anglo-French armies to withdraw from Egypt, leaving Nasser in full control of the canal.

The net effect of all this on Egypt's fortunes in the modern world cannot be underestimated. Egypt's position as the leader of the Arab world was strengthened. The Russians were not long in providing financial aid for the dam. In early 1960, therefore, Egypt was finally able to begin work on the Aswan High Dam. At the same time, Egypt's diplomatic position had become even stronger. In February 1958, Syria, hard-pressed by communist insurgents, turned to Nasser for help. The result was the federation of the two nations into the new United Arab Republic. One month later, yet another Egypt-dominated political unit was set up, the United Arab States, comprising the U.A.R. and Yemen. (Though Yemen remains a sovereign state.)

In addition to these major steps the years since 1956 have seen Egypt strengthen its ties with India and create new ones with Western Germany and Italy. Nasser managed to conclude trade agreements with both the United States and Russia on the same day in 1958. Finally, in late 1959, after Nasser had arranged to compensate the previous canal owners for their loss, the United Kingdom resumed diplomatic relations with the U.A.R.

Egypt is not without its difficulties, of course, either domestic or international. The country is still quite poor, and the population is increasing so rapidly that by 1970 not even the Aswan project is expected to provide enough fertile land to support it. There are rumblings of discontent in Syria too. The Syrians are irked by the ebbing away of their independence under U.A.R. leadership—a loss that has not been compensated for by any substantial improvement in their country's economy. Nor has Egypt's claim to Middle Eastern dominance gone unchallenged.

Iraq, a traditional rival, continues to resist U.A.R. leadership in Arab affairs. Tunisia is likewise independent-minded and restive.

With peace and aid, however, Egypt is making progress in its ambitious economic schemes. The World Bank is financing improvements to the Suez Canal to the tune of \$56,000,000. One U.A.R. five-year plan involves an outlay of \$750,000,000. A nuclear physics laboratory has been built in Cairo.

Egypt is the melting pot of the Middle East. For centuries, people from all around the Mediterranean and even from more distant places have been settling on the green banks of the Nile. Hyksos, Hittites, Assyrians, Persians, Macedonians, Romans, Arabs, Crusaders, Turks, French and British—all invaded Egypt by way of the Nile Delta. Ethiopians invaded Egypt from the south.

The advent of the Arabs in A.D. 639 was the outstanding single event affecting the very foundation of Egypt's life. For they brought with them Islam, the religion founded by Mohammed. The Arabs were completely absorbed into the rest of the population. Soon, Egypt became a Muslim and Arabic-speaking country. Islam is not merely the predominant faith in Egypt; most of it is a way of life for Muslims (who do not call themselves Mohammedans). Thus, in order to understand the Egyptians and their culture, one must first understand something of Islam.

For more than six hundred years after the Arabs came to Egypt, different Arab-Egyptian dynasties ruled over the country with varying degrees of benevolence and constructive achievement. Public works, agriculture, trade, architecture, education, art, science and literature all flourished to a degree unequaled before.

Cairo (El Qahirah) was founded in A.D. 969, and in the following year the El Azhar Mosque was built. Though El Azhar started only as a mosque, it soon grew into a university also, today one of the oldest in the world. It was (and still is) the most prominent institution of learning to preserve Islamic theology and

the Arabic language and literature, especially during the dark ages that engulfed Egypt some time after the Crusades. These long exhausting wars left Egypt weak and poor.

In A.D. 1250 and for 267 years thereafter, the country fell an easy prey to the Mamelukes (*Mamaleek*)—imported Circassian bodyguards of the Egyptian sultans—who usurped the power of their masters. While the feudal Mamelukes lived off the fat of the land in extravagance and luxury, occupying themselves with intrigues and feuds, Egypt was sinking gradually into an abyss. The main sources of her livelihood were severely neglected; irrigation systems were left to deteriorate, and much of the cultivated land reverted to swamps and desert. Education and science suffered. Worst of all, the Egyptian people were excluded for that long period from any say in running national affairs. They grew cynical and indifferent.

The Turkish occupation that began in 1517 and lasted 270 years did not help. Among its ill effects, it drained Egypt of her best artisans and craftsmen, who were sent to work for the sultans in Constantinople. High tribute was exacted, which meant a heavy load of taxes on the oppressed, already poor Egyptian farmers.

The coming of the eighteenth century brought to Egypt a different, yet still bitter, taste of world struggle for power. The French, under Napoleon Bonaparte, occupied Egypt in 1798 but were forced to give up their stronghold three years later after the British destroyed Napoleon's fleet near Alexandria. New horizons now seemed to be opening up for Egypt.

The pendulum, however, swung back toward Turkish domination. In 1805, Mehemet Ali, an Albanian soldier in the Turkish army, gained control of Egypt. He declared Egypt's semi-independence from Turkey, and his family ruled the country for the next 147 years. That dynasty, last of which was Faruk I, simulated the traits of the Mamelukes, though less obviously.

Egypt's position, where three conti-

EGYPT

nents come close together, has been both a curse and a blessing. On the great trade routes between East and West, the country has always profited from international commerce. At the same time, men who have dreamed of world conquest have realized that they must first hold the shores of the Mediterranean—and, hence, Egypt. Alexander the Great, for example, established the seat of his empire in Egypt. Napoleon did not fight the British in the English Channel but decided he would do better by cutting their trade route to the East—in Egypt. Hitler, like Napoleon before him, fought and lost a decisive battle with the British, not in England, but at Alamein, in Egypt.

Though always in a commanding location, Egypt's importance to the world at large was increased by the opening of the Suez Canal in 1869. The significance of the canal—a link in the lifeline to Eastern possessions—was not lost on the British. In 1882, not long after the canal was

opened, they occupied Egypt and remained there for about seventy years.

Though political awareness among the Egyptians was being sharpened by occasional friction with occupation authorities, it was slow in developing to the level of strong, united public concern. Any trend in that direction was not encouraged by those in power. With the years, hopes focused on the goal of complete independence from foreign rule and an end to corrupt home government. On July 23, 1952, with a bloodless revolt led by twelve young army officers, a new era began in Egypt's history. In 1953, Egypt became a republic.

What are the Egyptian people like today? It is hard to distinguish one whose ancestors were Arabs or Turks from one whose forebears were the original inhabitants. There is, however, a general gradation in skin color. The northerners who have been living for generations in the mild climate of the Delta are for the most





EGYPTIAN STATE TOURIST ADMINISTRATION

HARBOR OF PORT SAID, the northern end of the Suez Canal. The city is built on a sand spit extending into the sea; and a 174-foot lighthouse beams from the outer pier.

part lighter in complexion than those who have been browned by the baking sun of the south. The reason for this is not merely a difference in climate. Northern Egypt is a well-trodden crossroads of the world, where all the invaders, save the Ethiopians, passed.

Besides the Muslims in Egypt, there are great numbers of Christians and Jews. A relatively high percentage of the Christians is found in southern Egypt and in large cities. People of the Jewish faith live mostly in metropolitan centers, such as Cairo and Alexandria. Muslims, Christians or Jews, they are all Egyptians. They have similar, if not identical, social customs, occupations and cultural backgrounds.

For centuries, mosques, churches and synagogues have stood side by side all over Egypt. The chanting voices of muazzins, calling atop the minarets for the Muslims to pray, often mingle with the ringing bells of neighboring churches. Religious holidays such as Christmas, Rosh Hashana and the Muslim New Year are recognized by the Egyptians at large. Interfaith marriages are common occurrences. Followers of the three faiths have served as the highest officials of the land as well as business and civic leaders. Muslims learn from their Holy Book, the Quran (Koran) of the similarities between Islam, Christianity and Judaism. Muslims believe in the Golden Rule; in life after death; in the revealed

Books (though interpreting them somewhat differently from either Jews or Christians); and in all the prophets, considering Jesus and Moses as such. Muhammad, the founder of Islam, is believed to be the last of the prophets.

Muhammad claimed to be simply a messenger of God. Islam to its followers means peace and submission to the will of God. Its teachings are simple and direct. "Religion is good deeds and decent behavior" were the words of Muhammad defining his creed. The faith is based on belief in the oneness of God (Allah in Arabic) and in the brotherhood of man. Muslims believe that each individual is directly responsible for his actions to his Creator. There is no priesthood in Islam.

It is interesting to note that about 3,500 years ago, the Egyptian Pharaoh Akhenaton initiated the earliest known religion based on belief in one God. His hymns are thought to have been a source of inspiration to the Hebrews. Many scholars regard the Great Hymn of Aton as the origin of one of the Psalms.

Along with history, government and religion, the Egyptians have also been profoundly influenced by the nature of their land. In the fertile valley where the life-giving Nile flows, agriculture is all-important. It represents the greater part of the national capital, labor and income.

The farmer, *fallah*, who makes up the majority of Egypt's population and constitutes the backbone of her economy,



AN ENCHANTING TERRACED GARDEN built around a pool and partly enclosed with severely clipped hedges. The Egyptians love gardens and parks and keep them in perfect order.



PHOTOS, EGYPTIAN STATE TOURIST ADMINISTRATION

THE CURVING BEACH at Alexandria, Egypt's second largest city. Visitors throng the strand to bask in the warm sun or to take a dip in the sparkling Mediterranean waters.



EGYPTIAN STATE TOURIST ADMINISTRATION

A "FALLAH," OR FARMER. Though men like him are the backbone of the nation, they were long neglected. Today, land reforms are giving the farmers hope of bettering their lot.

lives a simple and hard life. He works in his field from dawn till dusk, laboring with implements such as his forebears used six thousand years ago. He still irrigates his land by a *sakiah*, or water wheel, turned by a water buffalo he calls a *gamousah*. The *gamousah* plows his field, threshes his wheat and gives him milk as well. The farmer's mud-brick house is the same type in which his ancestors dwelt long ago. Through his long, tedious work in an old-fashioned, humble environment, the farmer cultivates virtues of patience and steadfastness. Although the majority of farmers cannot yet read or write, they have a keen grasp of what goes on around them.

In the little farming villages on the banks of the Nile, co-operation is part and parcel of the community's life. Even a *gamousah* may be shared. Overwhelming generosity and hospitality are deeply imbedded social traits of the Egyptians, no matter how meager and humble their means. A stranger can hardly pass by a farm or a village without being invited into a home and offered all available com-

fort. If the host has only one chicken to his name, it is not too much to place before his guest. (Muslims neither eat pork nor drink alcoholic beverages.) Courtesy and friendliness may be carried to great lengths, in the spirit of the Good Samaritan. Should a stranger ask a passer-by for directions, he may receive not only the needed information but find himself accompanied to his destination by an eager and willing guide.

Farms and small towns represent the basic way of life of the Egyptians. In the big cities, such as Alexandria and Cairo, there is interesting variety and contrast: the ancient and modern, native and foreign, Western and Eastern, all blend to make a colorful society. Where once only slim, lofty minarets etched the skyline, today there are also imposing modern skyscrapers. The latest cars, taxis and buses ride bumper to bumper on straight, wide, asphalt-paved boulevards. Along the old, winding, narrow streets, they may be squeezed in by horse-drawn carriages and donkey carts. From the clear blue skies above, one may hear the



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MODERN AGRICULTURAL EQUIPMENT, such as this tractor, means increased production from the fertile Nile soil—tilled and irrigated in the past by human and animal labor.

roaring whirl of fast transoceanic planes or the zoom of supersonic jets, taking off from or landing at nearby airports, among the largest and best-equipped of their kind.

Midst all the bustle of twentieth-century transportation, the placid Nile remains an important shipping route. Felukas—boats with huge white sails like the wings of a butterfly—still slowly swish up and down the river, carrying goods as they have from time immemorial. Nor can the rumblings of the swift streamlined trains, hugging the meandering banks of the waterway, quite drown out the singing of villagers making their way afoot or on the backs of animals along country roads.

It was in 1853 that the first train left Alexandria for Cairo. Egypt was the fifth country in the world and the first in the East to establish the railway train as a common means of transportation. Popular stories to the contrary, the camel is not among such means of traveling in the inhabited parts of Egypt. Though camels are used by farmers to carry products to

market, the overwhelming majority of Egyptians have never ridden one. The realm of the "desert ship" has been the vast Sahara. But even there, it is being replaced by the four-wheeled metal horse.

Suppose we take a stroll down a city street, say, in Cairo. We pass a dignified white-turbaned sheikh, his colorful robe swinging in the rhythm of his stride. With him is an *Ibn balad* (son of the town) dressed in a white cap and a *galla-biyah*, which looks like a night shirt. They rub shoulders with men well-tailored in Western garb, one wearing a regular hat, the other a red fez, or tarboosh. In the throng are two attractive women, the younger one smartly attired in the latest Paris fashion, the elder in a more conservative costume, her head swathed in a scarf. Sauntering nearby is a woman draped in yards of black fabric extending over her head but not over her face. Today fewer and fewer women still cover the lower part of the face. When they do, the "veil" is really an ornate wide-meshed net material, which is attached to a golden nosepiece. Far from

hiding a woman's charms, the arrangement accentuates them.

One must search far and wide to find a truly veiled woman. The regressive custom, which was introduced into Egypt during the Mameluke and Turkish rule as a mark of class distinction, is now almost something of the past. Women on farms have always worked side by side with men and have never been veiled. Contrary to a widespread misconception, Islam does not require women to be veiled, secluded or subservient to men. A Muslim woman may earn her living by any honorable means, and no one, not even her husband, has a right to her income or property unless she so desires. After marriage she continues to be known by her maiden name and her identity re-

mains intact. Today, in Egypt, there are women lawyers, university professors, teachers, nurses, dentists, surgeons, physicians, office workers. Eventually, all the obstacles to women's social progress created by custom must give way. The only standard established by Islam in this regard is a strong admonition that a married woman who works outside her home must always remember her sacred obligations to her husband and, most of all, to her children. If there is any conflict, the family must come first.

In the city, however, the man is generally the sole bread winner, and the woman is queen of her home. Keeping house is a full-time task. From childhood Egyptian women are trained to be good wives, loving mothers and excellent cooks. Many housewives enjoy the pleasure and comfort of washing machines, refrigerators, electric and gas stoves, pressure cookers, vacuum cleaners, air conditioners and other modern appliances, but the majority cannot afford such luxuries.

The bonds among the members of a family are very strong. The ties extend even to the most distant kin. Islam makes it a duty for an individual who is capable financially and otherwise to provide for needy relatives, even more so if they are women. Obedience, respect and veneration for one's elders, especially parents and particularly mothers, are summed up in the saying of the Prophet Muhammad that "Paradise is under the mothers' feet." This is not a one-way devotion. The parents' love for their children may be shown by affectionate pet names. Thus *Abu Ahmad* and *Um Ahmad*—"the father of Ahmad" and "the mother of Ahmad"—often become names of endearment used by the parents' friends.

Let us return to our city street. Regardless of the season, there is a never ending variety of delectable fresh fruit for sale, and markets overflow with the gifts of the Nile climate and soil. There are several kinds of scented grapes; succulent figs and pears; sugary dates and pomegranates; creamy guavas; sweet mul-



ARAB INFORMATION CENTER

TAMBOURS, or Archimedes' screws, are giving place to mechanical pumps for irrigation.



A PRETTY FARM GIRL carries a great sheaf of clover to feed her goat. On the farms, every member of the family has a job to do. Children help before or after school.



PHOTOS, EGYPTIAN STATE TOURIST ADMINISTRATION

SURGICAL MASKS take the place of veils for these modern Egyptian women—a surgeon and her staff. Many professions have opened their doors to the distaff side of Egyptian life.

berries and strawberries; juicy oranges, tangerines, limes, lemons and grapefruit; delicious mangoes and prickly pears; luscious peaches and apricots; cool, thirst-quenching watermelon. Street vendors sing out their wares. "Apricots, pink-cheeked, tender; who will be the lucky

prostrate themselves, putting their foreheads to the ground in token of their submission to God. Man-made distinctions fade away, for the worshipers believe all are equal in the sight of their Maker. Muslims pray five times a day, either alone or preferably in groups, where they are constantly reminded of the ideal of brotherhood.

Taking refuge from our Cairo street, which by now may be sunny and hot, we enter one of the air-conditioned department stores. On display are the latest fashions from Paris, London and New York. Just a stone's throw away are the exotic "Arabian Nights" bazaars of El-Mouski and Khan El-Khalili. Within their mazes one steps into another world, centuries old. Along the narrow alleyways are small shops where skilled craftsmen work patiently on gold and silver jewelry—some of it delicate filigree and some enhanced with precious or semi-precious stones. In other shops are copper and silver trays; rugs; tapestries; wooden work inlaid with ivory, ebony and mother of pearl; amber prayer beads; leather cushions and bags; silk brocades.



UNESCO

A MOTHER and a visiting nurse smile happily, both proud of the baby's robust health.

spender?" chants one. Another echoes him in the same rhythm. "Oh mangoes, luscious and sweet, come enjoy them, what a treat!"

Street cries, the clang of tramways, the jingle of bicycle bells, the toots of automobile horns, all suddenly cease on Friday at noon if there is a mosque nearby. This is the hour when Muslims come together for prayer. After performing the required ablutions, the faithful not only crowd every inch of the mosque but spread outside into the streets where they stretch rugs, mats and even newspapers, to secure a clean surface upon which to kneel and pray. Standing shoulder to shoulder in straight rows, they recite verses from the Quran, praising and glorifying the Creator. They kneel and



EGYPTIAN STATE TOURIST ADMINISTRATION

EGYPTIAN CO-EDS. All branches of learning are open to women university students.



EGYPTIAN STATE TOURIST ADMINISTRATION

AL-TAHRIR SQUARE, a spacious center in the modern part of Cairo. The building houses government offices. Also on this square is the famous Egyptian Museum, with priceless relics.

From the bazaar of perfumes is wafted the fragrance of roses, jasmine, musk, lotus, saffron, violets, magnolias, carnations, gardenias, lilacs, narcissus, peonies and lilies of the valley.

Leaving the bazaars, we come upon gardens and parks bursting with bloom. In the welcome shade of the trees, families are picnicking, playing or relaxing.

Sports clubs and stadiums offer more active forms of recreation. Soccer matches are especially popular in Egypt. Egyptian athletes excel in hockey, polo, weight lifting, wrestling, swimming, basketball, shooting, cycling, fencing, calisthenics, horseback riding, tennis and squash rackets. For more than twenty successive years, Egypt held the title of world champion in squash rackets. Egyptian swimmers have crossed the English Channel more than once and have broken world records. Heavy and middleweight lifting championships also have been among Egyptian trophies.

For children, there are circuses, merry-go-rounds and swings. Like boys and girls the world over, Egyptian youngsters play leapfrog, tag, hide and seek, hop-

scotch, marbles, walk on stilts and jump rope.

After dusk, Alexandria and Cairo twinkle with myriad lights. Some of the illumination comes simply from lanterns. Neon signs on night-club marquees, theaters, movies, restaurants, cafés, shops and department stores make "white ways" of the main thoroughfares. Most picturesque are the slender minarets when girdled with bracelets of light to beckon the faithful into the mosques for prayer. The minarets are lighted at festival time and all through the nights of Ramadan, the Muslim month of fasting.

This month has special significance for Muslim Egyptians. From moon to moon, or for about thirty days, adult Muslims fast from dawn till sunset. During those hours they neither eat nor drink, nor do they indulge themselves in any other way. Ramadan is "the month of generosity, piety and good will," some of the Muslims' ideals.

Ramadan is a particularly happy month for the children, who anxiously look forward to its entertaining evenings, special pastries, nuts and sweetmeats. After

sharing a sunset breakfast with their parents, groups of them go out swinging tiny multicolored glass lanterns and chanting the traditional songs of Ramadan. The end of fasting is observed by donations to the poor. Then there are merry celebrations for all.

Similar festivities take place on the Muslim New Year, on Muhammad's birthday and on the day solemnizing the yearly pilgrimage to Mecca. This last occasion also commemorates an event related in both the Bible and the Quran, signifying the supreme test of man's submission to the will of God. Abraham was about to sacrifice his beloved son in fulfillment of the Lord's command, when it was revealed to him that a sheep would suffice. The Muslims therefore offer a lamb and bestow the greater portion of it on the needy. Besides, the Muslims pay alms to the poor from their savings and invested capital. This is not considered charity but a duty enjoined upon the Muslims by the

Quran. Such a tax for the poor is over and above all other taxes that the state may levy, and is set apart for those who need help.

Now that Egypt has stepped over the threshold into a new era, there is an even greater need to settle the accumulated old problems. Many steps in the right direction, such as land reform including a more just distribution of land, have already been taken, but many more are necessary. A long-standing difficulty is the fact that the population is increasing steadily without a corresponding rise in cultivated land or in land productivity. More than 90 per cent of the country's total area is still uninhabitable desert. Egypt's economy and foreign exchange have long been critically dependent upon one crop: long-staple cotton (the finest in the world). Industry and other national resources have been neglected.

The condition of the average farmer is still far from satisfactory. Illiteracy has



EGYPTIAN STATE TOURIST ADMINISTRATION

“CLIFFS” of modern apartment houses rear above the ancient Nile while along the banks are moored houseboats—the dahabeahs that have long been a feature of Nile River life.

been high and the standard of living low. The masses of the Egyptians have had little opportunity to participate in running the affairs of the nation. Their potential gifts for self-government were left untapped for generations. Thus, like any other growing nation, the new Egypt is faced with the greatest challenge of all; that is, to learn and practice the art of democratic, representative government.

Gradually, however, more industries, with modern methods, are being developed. Projects for more hydroelectric power and wider irrigation systems are being carried out. Fertile soil is being reclaimed from the desert. Bridges, canals and roads are being built. Oil and

mineral production are increasing. Iron and steel works are also going up. Social welfare plans are rapidly expanding and include more hospitals and public-health programs, schools and other undertakings—all aimed at establishing a sound economy and raising the people's standard of living.

Egypt is on the march once more. Her dynamic progress and modern achievements are enhanced by her Islamic culture and Oriental charm. This melting pot of East and West belongs to the remote past, the present and the future. Egypt will remain as old as time and as young as tomorrow.

BY ABDELMONEM SHAKER

EGYPT: FACTS AND FIGURES

THE COUNTRY

Bounded on the north by the Mediterranean Sea; on the east by Israel, the Gulf of Aqaba and the Red Sea; on the south by the Sudan and on the west by Libya. Total area: 386,198 sq. mi.; population, about 23,000,000. Cultivated and settled area (Nile Valley, Delta and oases) is only about 13,500 sq. mi.

GOVERNMENT

Formerly a constitutional and hereditary monarchy, Egypt was proclaimed a republic on June 18, 1953. A Revolution Command Council exercised executive power, assisted by a cabinet. General Muhammed Naguib became the first president and premier, but was relieved in 1954 by the ruling military junta. Colonel Gamal Abd el-Nasser was made premier and charged temporarily with the responsibilities of chief of state. The old constitution was suspended. In January 1956, Premier Nasser presented a new constitution to the Egyptians, which they voted for in June 1956. In general, it provides for the building of a welfare state. Egypt joined Syria in the United Arab Republic in 1958.

COMMERCE AND INDUSTRIES

The National Production Council in 1954 announced a 10-year plan to increase production by further land reclamation. About 75% of the population is engaged in agriculture, which is almost entirely dependent on irrigation and is limited to about 3% of the total land area. Other industries include cotton ginning, textile milling, food processing, steel and copper production; manufacture of chemicals, fertilizers and synthetic rubber; fishing; and a thriving film industry. Chief agricultural crops are cotton, wheat, rice, sugar, onions and barley. Minerals produced include gold, phosphate rock, petroleum, asbestos, salt, building stones, manganese and cement. Chief exports: cotton, salt,

manganese, textiles, asbestos, building stones and cement. Chief imports: machinery, vehicles, timber, leather, petroleum products and coal.

COMMUNICATIONS

The Nile is the great highway and much traveling is done by boat. Railways, state-owned, have a mileage of 4,188; private companies own over 862 mi. of agricultural light railways. Length of roads is about 8,500 mi. There are international wire and cable connections, about 6,400 post offices and stations and regular air-mail service. The Suez Canal, 102 mi. long, connects the Mediterranean and Red seas. Some 30 foreign airlines are served by Egypt's 11 civil airports. MISRAIR, an Egyptian airline, services the whole Middle East.

RELIGION AND EDUCATION

More than 90% of Egyptians are Muslims. The remainder are Coptic and Eastern Christians, Roman Catholics, Protestants and Oriental Jews. Elementary education is free and compulsory; secondary education also is free. Approximate number of schools: kindergartens, 402; primary, 7,400; secondary, 680; industrial, commercial and agricultural, 87; teacher-training, 114; other specialized schools, 120; art institutes, 2. The 3 state universities are Cairo, Alexandria and Heliopolis. A fourth is to be opened at Asyût. There is a UNESCO center at Sirs al-Layyan. Al Azhar University (in Cairo)—1,000 years old—is the highest authority in Islamic teachings and Arabic-language studies in the world.

CHIEF TOWNS

Cairo (capital), population, 2,500,000; Alexandria, 1,200,000; Tanta, 500,000; Mahalla el Kubra, 300,000; Port Said, 178,400; Suez, 109,800; Mansura, 108,000; Asyût, 96,100.

THE NILE, which has seen many boats like these, rolls past something less familiar: a modern luxury hotel.

Cairo

... Nile metropolis

CAIRO, the capital of the United Arab Republic, lies on the Nile just twelve miles south of the delta's apex. Most of the city spreads out from a five-mile strip along the eastern bank of the river. The city's total area is roughly eighty-three square miles. Stretching westward from the river are the barren pink and gray heights of the great Libyan Desert. When spring visits Cairo, so do the sands of the desert, blown there by erratic winds. Cairo's climate, however, is sometimes delightful. Cool evening breezes temper the summer heat, and the winters are bracing—even chill at times. But in the fall, Nile floods are followed by weeks of unpleasant humidity.

In the midst of this curiously mixed scene—on the one hand, the Nile, the

giver of life; on the other, the sterile, inhospitable desert—the Arab world's most colorful city flourishes. Today, despite its great age, Cairo is experiencing growing pains. Its dank, treacherous slums are being torn down. In their stead are rising new factories and apartment houses, in marked contrast with the glories of antiquity on all sides. The road to the Pyramids outside Cairo is dotted with new chemical and pharmaceutical factories. In the city itself, light industries are springing up everywhere. Even the resort area of Helwan, to Cairo's south, is changing face. With the help of West German engineers and capital, a steel mill has been built there. Helwan is also home to a plant making railroad freight cars, another producing copper and alu-



UNITED ARAB REPUBLIC



minum plates, a third turning out nitrate fertilizers.

Many veteran Cairo residents and visitors are happy with this change and with the new style of architecture. They see it as adding a welcome touch of diversity to the national life. Modernization is changing more than architecture, too. With the blessing of the U.A.R. Government, the career girl has come to Cairo. Through the centuries, custom has confined Muslim women rather closely to the home. The law of supply and demand is slowly emancipating her, though—at least in Cairo. The career girl is finding steady employment among the growing number of firms being established in Cairo by foreign businessmen. They need Arabic-speaking secretaries desperately. She

has also made a major breakthrough at one of Cairo's newest and most luxurious hotels. The management has allowed girls to wait on table in one of their dining rooms. It was a radical step for Cairo but has proved successful. "Young women are showing themselves very adaptable," one Cairo businessman admitted. They are also proving themselves no different from their Western counterparts. Six of the first thirty-two waitresses resigned to marry customers. Of twenty-five career girls taken on as conductors for Cairo buses in a six-month experiment all but three had married drivers or passengers by the end of the experiment.

Despite the jarring effect of much of this "progress," Cairo stands to increase

trade thereby. Equipped with new products to sell and a greater buying power of its own, Cairo can now capitalize heavily on its unique location. Situated in the midst of the Arab world and bisected by that mighty commercial artery, the Nile, the Cairo area has been a natural focus for traders since the days of the Pharaohs. Its importance increased with the founding of the city in A.D. 969. The long Turkish domination of Egypt, which lasted from the sixteenth into the nineteenth century, somewhat diminished the city's stature. Since the middle of the nineteenth century, however, Cairo has slowly been regaining its place as the trading and distribution center of not only North Africa but the whole Middle East. As this part of the world expands economically in the near future, as it seems likely to do, Cairo's influence will grow even stronger.

Cairo's pre-eminence as a trading center has always strengthened its claim to political and cultural leadership of the Arab world. Cairo is the home of the Arab League. Its radio station, the Voice of the Arabs, is enormously powerful and boasts listeners over much of Africa and southwest Asia. Its newspapers have much the same power. In addition, Cairo is the center of Muslim learning. Its unparalleled facilities for research draw Arab scholars from everywhere. Its National Library, for example, contains a magnificent collection of Korans, as well as books and manuscripts in Arabic, Persian, Turkish, Amharic and Syriac. The University of El Azhar is the chief theological seminary in the Islamic world. Huge Cairo University is surely the finest such Arab institution anywhere. The city's Academy of Oriental Music and Society of the Arts, furthermore, have enthusiastic support.

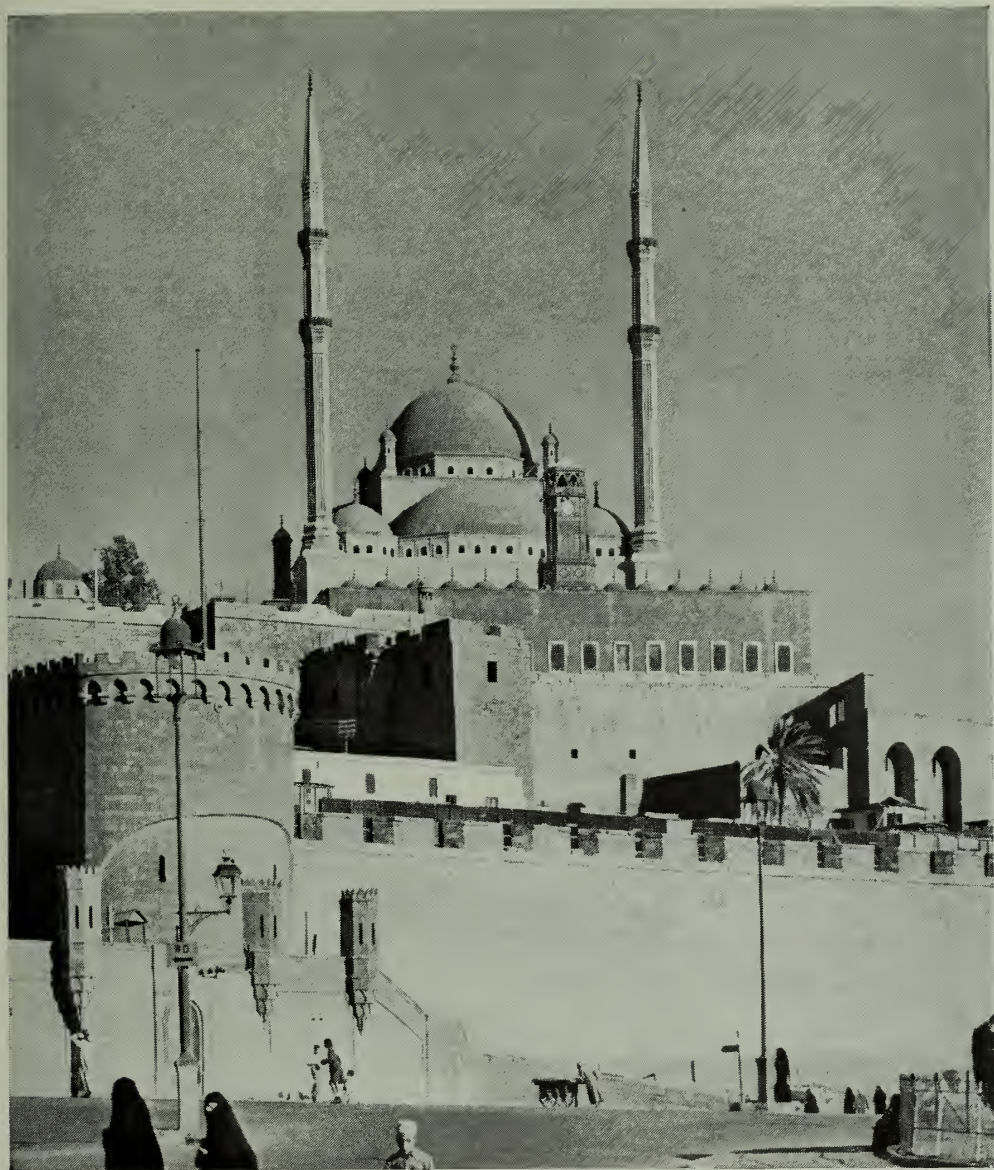
Landmarks, Old and New

For all the recent changes, Cairo has kept most of its basic features. The great citadel, al-Qala, still towers over the city from the Mokattam hills, where Saladin erected it eight hundred years ago. Slightly to the west and northwest of the

hills is the old, or "medieval city." Within its crumbling walls are some 365 mosques. Modern Cairo has grown around, but not eclipsed, these two landmarks. The northwestern portion of the city and the suburban areas outside it, like Heliopolis, created by Belgian enterprise early in this century, are centers of modern architecture and modern tastes. The medieval city and the citadel remain apart. They are proof to the visitor that the old Cairo, the Cairo that for so long has been a show place of many styles of great architecture—the Cairo, in fine, that he came to see—has not yet been drowned by "progress."

Before taking a closer look at this and the new Cairo, we should learn something of the city's past—both the glorious and the inglorious. At its height, of course, Cairo achieved a splendor that could be rivaled in its own part of the world only by the Baghdad of the ninth century. In the eleventh century, Cairo was the center of a vast Islamic empire. Nasir-i-Khusraw, a Persian missionary, has left us a description of the city as it was in 1046-49. The Caliph's attendant shaded him with a parasol encrusted with precious stones. Each of seven galleys drawn up on the bank of the Nile had an over-all length of 150 cubits and a beam of 60 cubits. (A cubit equals 18 inches.) The Caliph's city property included 20,000 houses, mostly of brick, rising to a height of five or six stories. The main streets were roofed and lighted by lamps. Mosques clustered thick in both Cairo and the old city of El Fustat. Nasir commented: "I could neither limit nor estimate its wealth and nowhere have I seen such prosperity as I saw there."

Cairo is, of course, much younger than Egypt itself. The site was empty long after the Pharaohs, Egypt's ancient rulers, had been dead many years. The Pyramids were already old when the site was merely wasteland and sown fields extending from the Nile to the Mokattam hills. Only a few fortresses stood there when the Arabs began their invasion of Egypt, then a province of the Byzantine Empire, in A.D. 639. Finally, in 641, Amr, army commander in chief for



TRANS WORLD AIRLINES

THE DAZZLING ALABASTER MOSQUE WITHIN THE CITADEL

The Citadel (El-Kala), built by Saladin about 1177, is a landmark in Old Cairo. It stands on several hills. Within the walls are five mosques. This one takes its name from the gleaming stone of which it is built. Besides the mosques, the Citadel contains an extensive palace and an extraordinary well that has been bored down through solid rock for 270 feet.

the victorious Caliph Omar captured the Roman fortresses and built a town, which he called Al Fustât. This was the first Mohammedan capital of Egypt.

Fustât, in Arabic, means "tent," and this is the story the Arabs tell as to how the name came about. When the victorious general marched north to capture

Alexandria he left his tent standing because he refused to disturb the doves that had commenced building there. On his return from the conquest of Alexandria he commanded his army to build their quarters around his tent which was still standing. From that fact the new settlement, which was the first Arab city of



CAIRO ON THE NILE is a great river port. We are here looking across the branch of the Nile between the island of Roda, on which we are standing, and that part of the city called Old Cairo. The craft moored along the farther bank are feluccas with their short masts and long, slender

spars. The stone wall on the right is part of an embankment protecting a garden. Along the top of the wall visitors walk to see the famous Nilometer. This is a large stone well with a graduated pillar in the centre to indicate the rise and fall of the river.

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DONALD MCLEISH

THE WATER SELLER with his goat skin bottle and brass cup is one of the commonest sights although waterworks now supply most houses, and here and there one can see a public drinking pipe jutting from a wall. The people still continue the old way of doing things. A squeeze from the water seller's elbow sends a jet of cool water from the shining nozzle.



KOSTICH

A HOLY CARPET RETURNS FROM MECCA

Each year thousands of devout Mohammedans make the pilgrimage from Cairo to the holy city of Mecca, in Arabia. It is the duty of every follower of Mohammed to go there at least once in his lifetime. The most sacred shrine at Mecca, the Kaaba, is always covered with a carpet, which is renewed annually. Here we see a carpet and its honor guard on the return journey.



PHILIP GENDREAU

A LION STANDS GUARD BY THE NILE

Majestic and dignified as a Pharaoh, a gigantic sculptured lion keeps a calm vigil above the restless color and noise of a typical Egyptian crowd. Near the entrance to Cairo's bridge over the Nile, Egyptians mingle, old-style and new-style. Some wear Western dress; others wear fezzes and Egyptian garb. Burdens are carried either on the head or in baskets.



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IN CAIRO BAZAARS the way is blocked by donkeys and mules, carts and carriages, besides the crowds of Egyptians, Arabs, Jews, Syrians and a sprinkling of European tourists. There is always a pandemonium caused by the shouting of the coachmen and camel drivers, as they try to clear the way, and by the haggling in the shops. Awnings above the crowd give shade.



© E. N. A

MOSQUE EL AZHAR, known as "the splendid," which can be seen at the end of the street, was converted into a university nearly a thousand years ago. Students come from all parts of the Moslem world to gain knowledge of the Koran. The enrollment is over ten thousand. Their ages range from fifteen to seventy-five for, indeed, some spend their lives here.



ISAAC JONATHAN FROM CUSHING

HOUSEBOATS ON THE NILE, where the historic river flows past Cairo. The floating homes are a fashionable way of finding some respite from the stifling heat of summer.

THE COLOR OF CAIRO

Egypt, came to be known as Al Fustât, "The Tent."

Fustât soon became quite an important settlement with mosques, palaces, barracks and the dwellings of an Eastern capital. The summer palace, where the emirs of Egypt often resorted to enjoy the cool breeze, stood on a spur of the Mokattam hills where the Citadel now stands, and another magnificent palace had been built by Ibn Tulun in the Royal suburb of Al-Katâ'i.

In 969 a new Arab conqueror came down into Egypt. He captured Fustât and laid the foundations of a new city. It is said that on a clear August night he marked out the boundaries of his new city on the sandy waste which stretched north-

east of Fustât, and a square about a mile each way was pegged out with poles. Each pole was joined by a rope on which bells were hung, and it was arranged that at the moment when the astrologers gave the signal that the lucky moment had arrived, the first sods were to be turned.

While the workmen were awaiting the signal a raven perched on one of the ropes and set the bells tinkling merrily. Straightway every workman thrust his spade in the earth and began to dig. At this moment the planet Mars, which the Arabs call Al-Kâhir, was above the horizon, and although this was looked upon as a bad omen, the raven's signal could not be ignored. The new city was called after the planet Mars, "Kâhirah"—mean-



PIX

A HUMBLE DWELLING in the old section of Cairo. Built long ago of clay and stone, this hovel tells its own story of poverty and discomfort. A caliph's tomb is in the background.



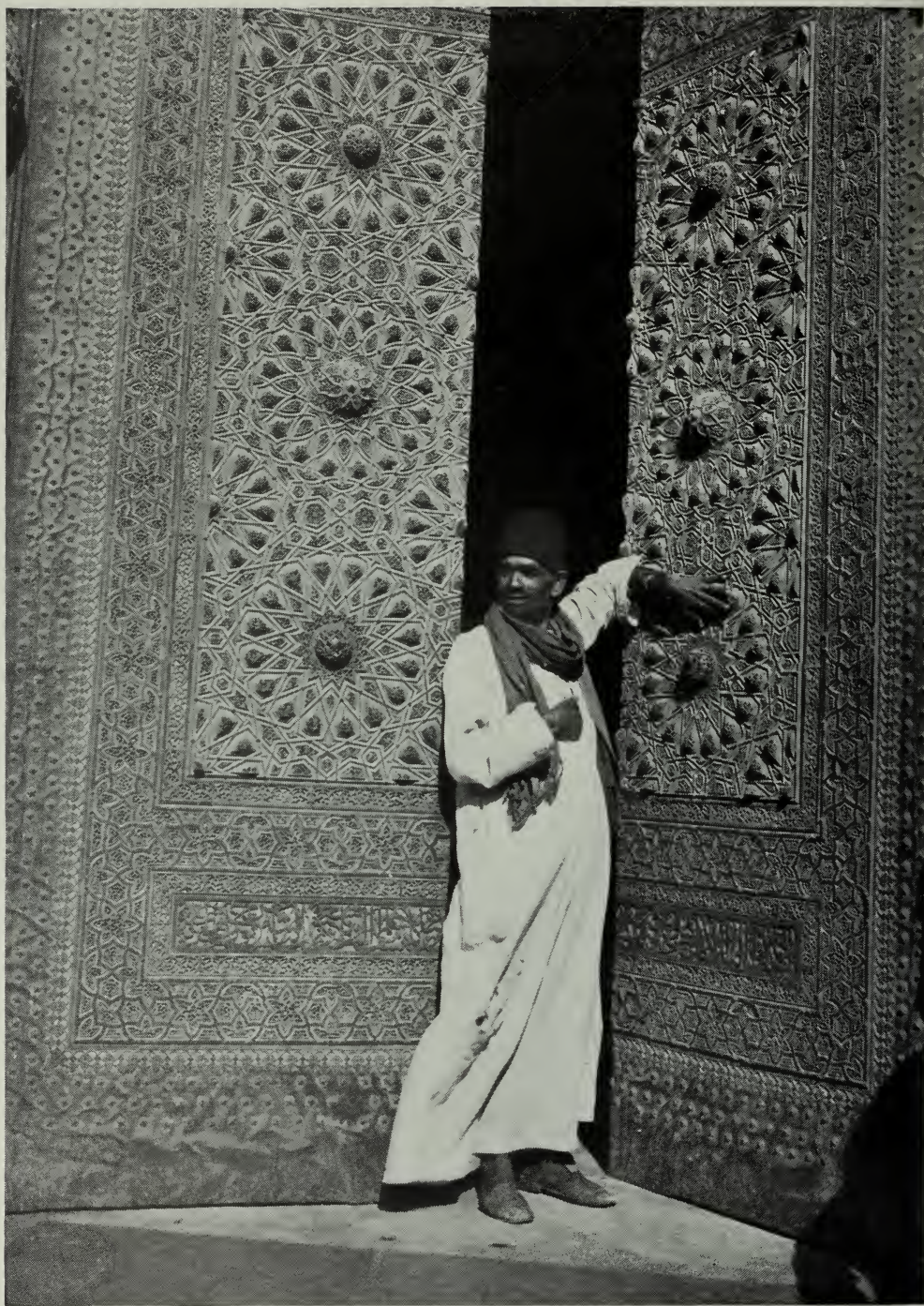
DONALD MCLEISH

BLUE PORCELAIN fashioned into tiles makes this one of the loveliest of mosques and has given it the name of "the Blue." The tiles are arranged on the eastern wall of the Liwan, or sanctuary, which the visitor sees from the palm court. There are patterns of exquisite design. "Blue Mosque," or Ibrahim Agha Mosque, is situated near the Wezir Gate.



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TALL MINARETS, standing up against the sky, surround us on all sides if we climb up to the flat roofs of any of the houses in the centre of the city. From the doorways opening out on the galleries of these towers, officials, called "muezzins", appear five times every day—at dawn, noon, four o'clock, sundown and midnight—to call the Faithful to prayer.



THE MOSLEMS DECORATE THEIR MOSQUES WITH ORIENTAL WRITING

Because their religion forbids drawings or sculpture of humans and animals, the Moslems decorate their mosques with fine arabesque patterns and even writing. The low panels in the bronze door of the Mohammed Ali mosque show how writing can be used for ornamentation. The letters are so crowded as to be illegible but probably the inscription is from the Koran.

THE COLOR OF CAIRO

ing "the victorious"—and out of this we have derived the modern Cairo.

Thus was founded the great City of the Caliphs, of which it presently came to be written: "He who hath not seen Cairo hath not seen the world: its soil is gold, its Nile is a wonder, its houses are palaces, and its air is soft, its odors surpassing that of aloes-wood, and cheering the heart, and how can Cairo be otherwise when it is the mother of the world?"

Just one word more on Cairo's history. It was captured by the Turks in 1517, by the French in 1798, by the British who handed it back to the Turks, in 1801, and in 1882, it was again taken by the British.

Until the year 1883 Cairo was a very fair specimen of a large Oriental city, where Eastern life and character could be observed with delightful ease. It was just an Eastern city, and nothing else—decayed palaces, dusty streets, a considerable amount of filth and that endless variety of color of which no Western institutions may ever rob it.

The people were tolerant, and became more so as they mixed to a greater extent with Europeans. Railways, telegraphs and other inventions of the Frange, or European, had shown them that the "magic" of the West was more powerful, and probably more useful, than their own.



EWING GALLOWAY

SHARIA FUAD EL AWAL, A BUSY STREET OF DOWNTOWN CAIRO

Ciguerel department store is a gleaming white addition to tree-lined Sharia Fuad el Awal, one of many broad avenues in the modern quarter. The wide view of the intense blue sky chases away all the Oriental mystery that is so much a part of the older sections of Cairo where, in the shadow of magnificent mosques and palaces, tenements crowd narrow alleyways.



THE MOSQUE OF SULTAN HASAN—one of the finest in Egypt—stands on a shelving rock opposite the citadel. It covers more than two acres, and its loftiest minaret, 267 feet high, is the tallest in Cairo. This mosque, built in 1357, so pleased the Sultan that he had the right

hand of the architect cut off so that he could not design another. Next to it is the chief Liwan, or sanctuary, which is built on the side towards the holy city of Mecca. It is a madrasah, or school mosque, and classes for teaching Moslem religion and law are held there.

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With these improvements the city began to develop rapidly. A person acquainted with the old Cairo, before its face was altered by Western influences, would see a great many striking changes. But in spite of improvements, much of Cairo preserves the air of an Eastern city.

The Mingling of East and West

Now these are matters of a more or less historical character. It is good to know something about them before setting out to explore and enjoy the wonders of the city. But even if we know nothing about them we shall be able to appreciate Cairo.

Impressions will crowd in upon us at such a furious rate that we shall hardly know how to sort them out afterward. This mingling of East and West, this jostling of strange and varied types of people and costumes, this jumbling together of buildings which seem like those only seen in dreams, this throb, throb, throb of one of the greatest cities in the East, will prove to be a source of endless delight.

But we shall not see much of all this in the European quarters—the Taufkia, the Ismailia and the Kasr-el-Dubara quarters, occupying the northwestern portion of the city. Here are the hotels, banks, ministerial offices, consulates, clubs and fine palaces of wealthy Egyptians and Levantines as well as of Europeans.

Where Aïda Was First Produced

In the center of Taufkia is the Esbekia Garden, a beautiful part, with Opera Square on the south. In the Opera House, which is now shabby and brown colored, was first produced Aïda to celebrate the opening of the Suez Canal, and the costumes are still used when that opera is given. The Khedive Ismail, who nearly bankrupted the government, paid Verdi \$50,000 to write an opera for the occasion, but that was not his only method of celebrating, nor the only expense he incurred in connection with the great event.

Sharia Kamel is Taufkia's principal thoroughfare, its Fifth Avenue. Near the northern end of it once stood the luxuri-

ous Shepherd's Hotel, often called the most famous hotel in the world. Built in 1891, it was sacked and burned in 1952 during a savage riot. Sharia Kamel, at its southern end, becomes Sharia Abdin, which leads to the Midan Abdin, one of the city's royal palaces.

To the northwest of the European quarter is Bulak, the old part of Cairo, which is still kept very busy loading and unloading the produce carried up and down the Nile in strange ships. Like the rest of Cairo, the scene is bright and full of life.

Wonderful Palace on an Island

Bulak is easily reached by street car, and on the nights of popular festivals it is well worth seeing with its crowded streets, its gaiety and its curious customs. Just opposite is the Island of Bulak, commonly known as Gezira, where Ismail Pasha built a wonderful palace, such as those they used to build in the time of the Caliphs, and laid out a race course. The palace has now become a hotel, where the Khedival Sporting Club is always holding entertainments enjoyed both by Europeans and Egyptians. The island of Gezira is also the site of numerous foreign embassies and many of Cairo's wealthy citizens have villas there.

The fine Kasr-en-Nil Bridge, or Great Nile Bridge, connects the island with the east bank of the Nile. Most of the different types of people who live or work in the city can be seen by standing on this bridge between 6:30 and 9 A.M. when it is crowded with merchants, market-gardeners and peddlers, dressed in the oddest costumes, and bringing in their wares to the markets of the city. The brown water of the Nile flows beneath, dotted with the peculiar craft of Egypt. Tall-sailed painted boats, called feluccas, sway gently in the morning breeze and wait for the afternoon when the bridge is opened to allow such vessels to pass up or down the river.

Near the eastern end of the bridge is the Cairo Museum, which contains the most valuable collection of Egyptian antiquities in existence. The body of



GENDREAU

GEZIRA, which means "island" in Arabic, is connected to Cairo by a bridge. On holidays, people cross from the mainland to stroll beneath the palm trees that shade the streets.

THE COLOR OF CAIRO

Tutankhamen and the priceless articles, pictured with the chapter on Ancient Egypt, are on display here. We may see also the mummies of Egypt's mightiest Pharaohs so well preserved that one may even tell the color of the hair. The museum was started through the efforts of Auguste Mariette, a French Egyptologist, and a statue of him occupies a place in front of the museum.

Then we come back to the main streets. What do we notice? A visitor from the West will probably feel quite at home with the kodak shops and pharmacies but will be impressed by the way Cairo seems to live in the streets. The innumerable cafés of the Esbekia place their chairs and tables on the pavements, so that it is frequently necessary for a passer-by to step into the road, and run the risk of being knocked down by an arabiyeh, or carriage, dashing through the street at the absurd rate these Eastern drivers love so much.

Backgammon for a Cup of Coffee

These cafés are interesting, since in them will be found people from almost every quarter of the earth. Here are groups of Italians, Greeks and Levantines arguing noisily or drowsily smoking the bubbling nargileh (water-pipe), or playing a kind of backgammon for the price of a cup of coffee.

As we continue through the streets, every step will reveal a new and fascinating picture. Odd little shops, protected from the sun's glare by torn flapping awnings, catch the eye. Not that the goods displayed for sale are always particularly attractive but the dark interior has an air of mystery and the promise, not often fulfilled, of strange merchandise. Now comes a door with a bead curtain jingling in the breeze—probably a barber's shop. A mass of color piled among the shadows of a hole in the wall proves to be a fruiterer's. Next to it is a native café with pitch-black Ethiopians and tall Nubians and a dozen other varieties of modern Egypt's many races.

The streets, of course, are choked with a motley crowd in which only the camel

or a lonely Arab from the desert seems able to maintain any dignity. The drivers of vehicles and beasts of burden keep up an incessant shouting as they thread their way through the crowd. "Make room, O my mother!" calls a shrill-voiced donkey-boy. "O Sheik, take care!" "You, good fellow, to your right!" "By your favor, effendi!" and so on.

A Street of Saladin's Days

There is even more bustle in Cairo's bazaars than in the streets. From the Ismailia quarter, the way down to the bazaars is through the Muski, an extremely long thoroughfare running toward the east. A tradition says that the Muski dates from the time of the famous Saladin, who was the Crusaders' chivalrous foe.

Its character has changed a good deal in recent years, and many of the native shops with their quaintness and smells and sleepiness have been replaced by large shops built on the French pattern with plate-glass windows. At one time practically the whole of the street was roofed in, and on very hot days it proved a cool, if crowded, retreat. On festival days one sees representatives of many lands, from Sweden in the north to the White Nile in the south, and from India in the east to Morocco in the west.

Motley Carnival of Cairo

It is one of the most characteristic parts of Cairo—a carnival in which the costumes of Europe, Asia and Africa mingle in a fascinating collection. At first it is a little confusing. Here are Turks, grinning Negroes from the Sudan, bored-looking fellahs, or peasants, in their bright rags, wily Levantines, green-turbaned Sherifs, or Moslem holy men, dignified Beduins, and people whose race it is often difficult to guess. All day long the street is packed with donkeys, strings of camels, loaded wagons, water-carriers with their tinkling glasses, sherbet and sweetmeat sellers, carriages and richly caparisoned horses, porters shaped like sickles, from the burdens they carry, gorgeously dressed women, beggar chil-



TRANS WORLD AIRLINES

TRAYS, PLATTERS, GONGS, VASES—ALL IN GLEAMING BRASS

The shining array of wares could hardly fail to catch the eye of a passer-by, which is what it is meant to do. One of the delights of the visitor to Cairo is to stroll through its bazaars, where all the shops are open to the sidewalk. Many of the articles are only inexpensive souvenirs, but one may also find useful objects and genuine works of art.

dren, closely veiled women and all the odds and ends of Cairo's astonishing medley. The ring of hammers is almost deafening in the bazaar of the Brass Workers; and a strong smell of perfume comes from the Scent-sellers' bazaar. In the Spice Market men pound strange roots and herbs in metal mortars. Beautiful rugs with intricate patterns, from Damascus, Ispahan and Samarkand, can be seen in the carpet shops.

The buildings of Cairo are as interesting as the people, and as full of color.

In the old Fatimate city is the great mosque-university of El Azhar, which was built by Gohar in 973. It is considered to be the most important Mohammedan university in the world.

The Voice from the Minaret

Every visitor to Cairo will remember the blue tiles of the Ibrahim Agha Mosque, the wonderful doorway of the Sultan Hasan Mosque, and the delicate ornamentation and graceful minaret of Kait Bey. In the Arab Museum there are a valuable collection of Arabian art and a fine library, which have helped to make Cairo the premier city of Arab learning.

We shall now go up to the Citadel on the Mokattam hills and look out upon the wonderful panorama of Cairo which is spread before us. We see below us a forest of minarets, rising gracefully from the flat-roofed, yellowish buildings in which the streets are like pathways of darkness. From these slender minarets, rising from Cairo's 250 mosques, goes out the call to prayer, not by the ringing of bells but by the human voice.

The Citadel, built, so some believe, from stones taken from the Pyramids, was once the key to fortified Cairo but now it is worthless as a military stronghold. Its greatest feature, apart from the view it offers, is the Mehemet Ali Mosque, with its two wonderfully slim and beautiful minarets.

The most direct road to the Citadel used to be through the Gate al-'Azab, and then along a narrow track walled on each side. It was in this narrow way that the massacre of the Mamelukes took place on

March 1, 1811. The Mamelukes, descendants of slaves, had become a ruling class. Before the massacre all the Mamelukes of any position or power were decoyed into the Citadel on the pretense that they were to assist in celebrating the appointment of Tusun, son of Mehemet Ali, to the command of the army.

How the Mamelukes Were Betrayed

Having taken coffee, they formed in a procession and marched down the narrow way with a body of the Turkish Pasha's troops in front and behind. As soon as they arrived at the exit gate, it was suddenly closed upon them. The Pasha's men at various vantage points then opened fire, and those Mamelukes who tried to escape were cut down by the sword.

It is said that of the 470 Mamelukes who entered the Citadel, only one came out alive, having made his horse leap through an opening in the wall to the moat below. The horse was killed by the fall, but the man escaped.

Revered Mosque of 'Amr Ibn al-'Asi

The first mosque to be built in Fustat was that raised by 'Amr Ibn al-'Asi, who conquered Egypt in A.D. 639. The present mosque of 'Amr stands on the same site, but has very little of the original building in it. It is not very attractive but the people hold it in special veneration. It is said that, after a long, disastrous drought (1825-28), Moslems, Christians and Jews went there together to pray for rain. On the next day it rained.

All through this glittering city you will find strange monuments of the people—mosques in plenty; old Arabic gates; an endless medley of bazaars, all hung with the brightly colored merchandise of Eastern lands; ancient churches founded by the Copts, which was the name given to the earliest native Christians; mysterious lattice windows—all the fascination associated with the Orient.

And just a stone's throw away, on the threshold of the Libyan Desert, the Sphinx looks out to the dim minarets of the city, and the Pyramids rise like golden stairways to the blue of the sky.

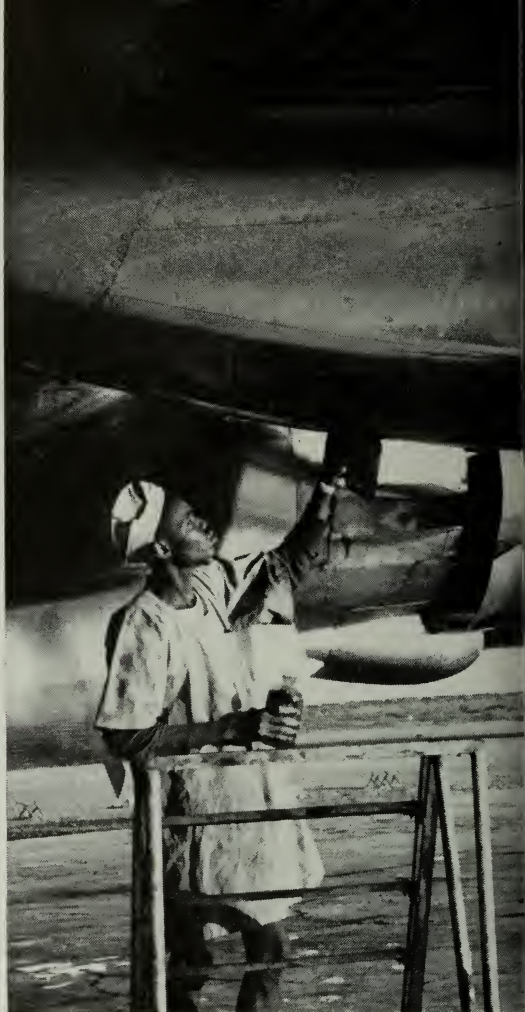
Sudan Republic

*... country of the Blue
and White Niles*

BEFORE its declaration of independence on December 19, 1955, Sudan was ruled jointly, as the Anglo-Egyptian Sudan, by Great Britain and Egypt. During World War II, however, the urge for independence sprouted among the Sudanese. When the conflict ended, Great Britain, recognizing the strength of the tide, began a graceful withdrawal. Egypt, on the other hand, clamored for union with the Sudan. It claimed that union was indicated because of the close ethnic, economic and historic ties between them. The Egyptians had conquered Sudan in 1821 and ruled there until the advent of the British. Moreover, the vast, sparsely settled Sudan would help solve Egypt's overpopulation problem.

The majority of the Sudanese did not agree. They pointed out that during an uprising in 1885, the Egyptians had been chased out of the Sudan. As further proof of local sentiment, the Sudanese stressed the fact that 30 per cent of their people have no cultural or ethnic ties with the Arab world at all. Even the others were opposed to large-scale Egyptian immigration. Taking a high hand in 1951 the Egyptian Parliament passed a constitution for Sudan that would have united the two countries. The Sudanese Legislative Assembly immediately rejected it.

Finally, in 1955, the Sudanese began to take matters into their own hands. In April, Premier Ismail el Azhari sided with the noncommunist bloc against Egypt and the neutralist nations at the Bandung Conference of African and Asian leaders, in Indonesia. In August the Sudanese Parliament asked Egypt and Britain to withdraw their troops within ninety days. On Friday, December 16, Premier el Azhari surprised every-



one, including his own Parliament, by announcing that the following Monday he would declare the country's complete independence from foreign rule. The British and Egyptians hastily decided to go along with the move. On January 1, 1956, Sudan's new status became official. One day later, formal recognition came from the United States, along with a letter from President Eisenhower wishing the Sudanese "every success in establishing a stable, prosperous and happy nation."

Despite a good deal of progress, the Sudanese are still short of these goals today—particularly stability. One reason for this is the wide ethnic and religious gap between the northern and southern areas of the country. The north is largely populated by Muslim



UNATIONS

AT WADI SEIDNA AIRPORT, which serves Khartoum, Sudanese mechanics check a transport plane with the ease of familiarity.

Instability is by no means confined to the south. The country's first general election, held in 1958, led to an armed uprising in the capital, Khartoum. Roughly 1,500,000 males voted, most of them illiterate, in one of the most colorful elections on record. In some constituencies, votes were cast for symbols (instead of names) of the candidates—elephant, locust, ax, stick, rifle, ear of corn and so on. The Umma Party came off best in the voting, thus returning Premier el Azhari to office. Seven months later, though, on October 17, 1958, a group of army officers, some of them pro-Egyptian, led by Lieutenant General Ibrahim Abboud, seized control of the Government.

The use of Nile waters has been another point of dispute. Agreements were made in 1929 restricting Sudan's use of them for dam purposes. In July of 1958 the U.A.R. charged Azhari with violating this agreement when he diverted waters for the Manegil irrigation project. Abboud settled this dispute after he came to power. His enemies at home charged that he had given in too readily to Nasser's demands, however. Abboud also signed a trade agreement with the U.A.R. that promises to promote roughly \$30,000,000 of business between the two countries per year. Whatever the merit of Abboud's policies, if Sudan were cut off from the Egyptian market for any prolonged period, Sudanese hopes for economic stability would wither.

Regarding its foreign relations elsewhere, Sudan has followed a rather consistent policy of neutrality with a slightly pro-Western tinge. One result of this policy, naturally, has been aid from both East and West. The amounts have not been spectacular but they have provided Sudan with some working capital at least. With continued help from such sources, Sudan may yet manage to diversify its single-crop (cotton) economy.

Looking at Sudan as it appears on the

Arabs, the south by pagan Negroes. The Negroes, still laden with memories of the Arab slave trade, resent the north's domination of the Government. From time to time this resentment breaks out into armed conflict. In the summer of 1955, shortly before independence was declared, a full-scale mutiny against Arab rule was launched in the southern province of Equatoria. The mutineers killed over four hundred north Sudanese officers, officials, merchants and their families in three days of fighting. Nor did feeling subside. Three years later, Father Saturnino Lohure, Roman Catholic priest and leader of the Southern Liberal Party, warned that political harmony for Sudan would come about only through federation, not through a unitary state.

SUDAN REPUBLIC

map, its most striking physical feature is the Nile River and its numerous branches. Chief of these are the White Nile, which begins far south in Lake Victoria (in Uganda), and the Blue Nile, which flows down from the highlands of Ethiopia. Their waters mingle at Khartoum, in the north-central part of Sudan. From here the main Nile continues northward, its course describing a huge S between Khartoum and the Egyptian border.

The famous six cataracts of the Nile are all north of Khartoum and all but one are within Sudanese territory. In making the great S sweep, the river flows through a narrow valley, dropping 935 feet in the series of cataracts. They do not have the appearance of the usual waterfall but, rather, are foaming rapids. Instead of being named, they are numbered, from north to south. The First Cataract is at Aswan, in Egypt, where there is a huge dam and locks, and a much larger dam is being built. The Second Cataract is just south of the Egyptian-Sudan border, near Wadi Halfa. The Third is below Kerma; and the Fourth, above Kareima. This stretch is the only section between the cataracts that is navigable. The Fifth Cataract is below Berber; and the Sixth (or Sabaluka Cataract) is above Wad Hamid (fifty miles north of Khartoum).

The greater part of the Nile flows through Sudan, and this is a major reason for Egypt's concern and interest in its neighbor. Without the storied river, both Egypt and northern Sudan would be completely desert.

Most of Sudan is a plain, built up through the ages by deposits from the Nile's overflow. There are only a few heights: the rather low Nuba Mountains in the center; the Ethiopian highlands on the southeast; the Ethai range along the Red Sea coast; the Marra Mountains in the west, along the Nile-Chad watershed; and the Imatong Mountains on the south, at the edge of the East African highlands.

In the north, where the Libyan and Nubian deserts (parts of the Sahara) flank the Nile Valley, there is little rain-

fall. Here the natural cover of vegetation is scrub, grass that grows no higher than twelve inches, and desert plants that can exist with little moisture. Toward the south, however, the amount of rain increases. Savanna—grassland with scattered trees—appears. Along the course of the White Nile is a region of obstructive marshes, called the Sudd. On the extreme south, near the Uganda border, are patches of dense, wet jungle.

One of the oddest facts about Sudan is that it is likely to be hotter in the north than in the south, which is not so very far from the equator. In Wadi Halfa, just below the Egyptian boundary, a temperature of 126 degrees in the shade is not unusual. Yet in the far south, nights may be chilly enough for overcoats.

Sudan is mostly a land of wandering herdsmen. Where farming is carried on, methods are still fairly primitive. The big exception to this is in certain sections of the Nile Valley, which specialize in long-staple cotton. The fiber is Sudan's chief contribution to world trade. The heart of cotton production is the Gezira, a region just south of Khartoum between the Blue and White Niles. It is some 80 miles wide and 150 miles long. Fertile as the soil is, it must be irrigated. Water



is fed to the Gezira from the Sennar Dam, on the Blue Nile. The structure was built in 1922-25 and is 3,300 yards long and 119 feet high. When the reservoir is full—during flood period, July–December—it extends 93 miles upstream.

Sudan contributes another product of international importance. This is gum arabic. It is gathered from wild acacias, mostly in the semiarid Kordofan Province of central Sudan. Gum arabic is used in making inks, adhesives and confections, and as a fabric filler and an emollient. El Obeid, a fairly large city 230 miles southwest of Khartoum, is the center of the gum-arabic trade and of trade in oilseeds. It has an airport, is the junction of a number of roads and caravan routes, and a railroad connects it with Khartoum.

Khartoum itself is the capital of Sudan. It is on the left bank of the Blue Nile, just above where that stream joins the White Nile. With Khartoum North (on the right bank of the Blue Nile) and Omdurman (a few miles north), Khartoum forms the lively center of all Sudanese activity—in government, business,

education. A 2,130-foot rail and road bridge across the Blue Nile connects it with Khartoum North; and a 2,012-foot tramway across the White Nile leads to Omdurman. By river and by railroad, Khartoum draws to it the commerce from Wadi Halfa, Port Sudan (on the Red Sea) and El Obeid. Khartoum was leveled by a battle in 1885 but has since been rebuilt on a modern town plan. It is the home of the University of Khartoum and the Khartoum Technical Institute.

Sudan has had a checkered history. In the days of ancient Egypt it came under the Pharaohs. The northern part was included in the old country of Nubia. Under the Romans, Nubia (the country of the blacks) was settled by Negro tribes. They mixed with the Hamites already there and formed a powerful kingdom. It was converted to Christianity (the Coptic faith) in the sixth century. In the fourteenth century, Islam became predominant, and the old kingdom of Nubia broke up into a number of petty states. Thus it remained until the late 1800's, when the whole territory became a condominium—the Anglo-Egyptian Sudan.

SUDAN REPUBLIC: FACTS AND FIGURES

THE COUNTRY

Bounded on the north by Egypt; on the east by the Red Sea, Eritrea and Ethiopia; on the south by Kenya and Uganda; on the west by the Belgian Congo, French Equatorial Africa and Libya. The Sudan is divided into 9 provinces. Area: about 967,500 sq. mi.; population, about 12,000,000.

GOVERNMENT

On January 1, 1956, Sudan became an independent republic with the consent of Great Britain and Egypt. There is a cabinet and a House of Representatives. Since 1958 actual government has been in the hands of the Supreme Council of Armed Forces.

COMMERCE AND INDUSTRIES

World's chief source of gum arabic. Other important products are cotton, cottonseed, hides and skins, vegetable ivory, groundnuts (peanuts), salt, gold. The chief grain crops are durra (great millet) and dukhn (bulrush millet). There are large numbers of livestock. Forests contain valuable woods, especially mahogany and vuba.

COMMUNICATIONS

Railways, 2,485 miles. A motor transport

service makes connections between some of the railroads and river steamers. There are 11,648 telephones; 11 wireless stations. There are 37 airfields, and the airline, which is government-owned, makes scheduled flights.

RELIGION AND EDUCATION

In the 6 northern provinces, most of the people are Muslims, though there are several small Christian communities. Among the tribes of the south, originally pagan, there are a number of Christian missions. Up to the level of high school, education is largely in the hands of the government, particularly in the north. Elementary-school education became free in 1955. Altogether there are over 2,000 elementary and secondary schools, trade and technical schools, mission schools, 9 teacher-training colleges, a military college, and the University of Khartoum, which includes the Gordon Memorial College and the Kitchener School of Medicine.

CHIEF TOWNS, WITH POPULATIONS

Khartoum (capital), with Khartoum North and Omdurman, 246,000; El Obeid, 53,000; Port Sudan, 48,000; Wad Medani, 48,000; Kassala, 41,000; Atbara, 37,000.



THOUGH Liberia and Ethiopia are separated by thousands of miles—Liberia fronting the Atlantic, Ethiopia the Red Sea—they share one important historic fact. For reasons we shall discuss later, their independence goes back much further than that of any of the other present-day African states. On the face of it, this could give them strong influence, particularly among the new states being born south of the Sahara. In reality, and unhappily, neither Ethiopia nor Liberia is a showcase for the advantages of freedom. Though each has much of what is needed for a healthy economy, the mass of their people have yet to be lifted out of grinding

poverty. This offsets the prestige of long independence and makes them poor matches for leadership in comparison with young nations like Ghana, for example, which in only a few years has made tremendous strides.

The West has an important stake in this matter. Both Liberia and Ethiopia have been friendly toward Western countries. In a position of leadership they might exert a calming and beneficial influence on the violence and bitterness rife among Africans as they pass from colonial to independent status. Moreover, to an extent they are a bulwark against Arab domination of the "new" Africa. Islam



has proved to have a great appeal in Africa. Out of a total population of 200,000,000, some 80,000,000 Africans are Muslims—40,000,000 of them south of the Sahara.

Liberia, of course, is far from being a typical African nation in several respects. It was founded early in the nineteenth century as a haven for freed Negro slaves from America. To be sure, the immigration from across the ocean has never been very large—even today there are only about 15,000 Americo-Liberians. Together with Westernized natives, though, this minority rules the country, despite the much greater number of the other Af-

ricans (about 1,500,000). That Americo-Liberians feel a strong attachment to the United States is quite evident. The names of their towns, their system of government—both are based on American models. This is true of their foreign policy too. They have been quite cool toward Russia; not until the late 1950's did they consider sending diplomatic personnel to Moscow.

This influence stops at domestic politics. The two-party system hardly flourishes in Liberia. The True Whigs (named after the nineteenth-century American Whig Party) have held power since 1877. Furthermore, the constitu-

tion permits a president not only an eight-year first term but any number of succeeding four-year terms. This promotes not only one-party but one-man rule. W. V. S. Tubman, for example, first elected to the presidency in 1943, has been re-elected three times thus far, most recently in 1959. His party, moreover, has held every seat in the Senate and House since 1959. Their opponents—the Reformation Party and the Independent True Whigs—see little hope of breaking the majority party's iron grip.

Although the length of their administration is criticized, the True Whigs are pointing Liberia in the direction it needs to go if economic stability is to be attained. Liberia has always had the resources—untouched forest lands and rich mineral deposits—to vary its one-crop (rubber) economy, but no capital with which to develop them. For decades the rubber industry itself was in the hands of one company—an American one. Today, other foreign firms are coming to Liberia. In partnership with local businessmen, they are mining iron ore, gold and diamonds. Several new lumber companies have also invaded the Liberian hinterlands; and sawmill production is expected to increase substantially.

Ethiopia, too, has economic resources as yet untapped. Its agriculture, handicapped to date by primitive methods, might well blossom in the near future. The Ethiopian plateau, part of the highlands of Africa, offers a mild climate and productive soil to farmers. Ethiopia also has a number of excellent water-power sites as well as considerable mineral wealth. Like the Liberians, the Ethiopians are well aware of these advantages and are trying to exploit them at long last. In 1957 a five-year development plan was launched, paid in part by domestic funds and partly by all-important foreign loans and grants.

Ethiopia's attraction for foreign investment may well play an important role in its future development. This requires, however, that Ethiopia steer safely through the perils of cold war politics—no easy matter. Though leaning toward

the West, Ethiopia has serious differences with some Western countries. For a brief time in this century, Italy held Ethiopia as a conquered land. There has also been trouble with nearby British Somaliland and also Kenya, likewise British territory. Border incidents have been common. Nor were the Ethiopians happy when Somalia, their neighbor to the south, and British Somaliland united on independence in 1960, a move that Britain supported.

As long as Emperor Haile Selassie, once called "the most able politician in East Africa," lives, however, the Ethiopians are assured of astute guidance. Since he assumed leadership in 1928, Selassie has turned his country into a constitutional monarchy, avoided an internal split between the majority Coptic Christians and the large Muslim minority (in the north), and adopted a neutralist posture apparently accepted by both East and West. The greatest challenge to Ethiopia's foreign relations lies ahead, though. As the new African states surrounding it gain their own independence, this ancient land may well find itself in the midst of a tinderbox. Only the wisest sort of leadership will enable Ethiopia to preserve its sovereignty and maintain the internal stability so necessary for economic improvement.

The kingdom of Ethiopia existed (with some changes of boundary) as far back as 1000 B.C. Yet little was really known about the country until comparatively modern times, though there are references to its wealth and power in many ancient writings. The tradition has been cherished that the rulers are descendants of Solomon and the beautiful Queen of Sheba, who journeyed from her throne in Ethiopia to Jerusalem. The fabled Ophir of Solomon, the city of sparkling gold, was possibly in Ethiopia; and the rich country reigned over by Prester John, the legendary adventurer of medieval times, has been identified by a few writers as Ethiopia.

Larger than France, Ethiopia owes its long integrity in large part to its situation upon a mountain stronghold. In 1896 it



UNATIONS

SAFE LANDING for an Ethiopian plane; air service now ties most of the country together.

was recognized by the European Powers as the Kingdom of Abyssinia, after defeating an Italian army at Aduwa. Forty years later the Italians, after an arduous campaign of several months' duration, conquered the country and annexed it as part of Mussolini's "empire." After World War II broke out the British successfully overcame the Italian armies in eastern Africa. Haile Selassie, who had been in exile during the Italian occupation, returned to the throne.

Inland from the coast there is a stretch of mostly barren lowland, sometimes falling to below sea level. The climate here is inclement. A good part of the country, however, is occupied by mountain ranges and fertile plateaus and valleys, where the weather is pleasant.

The mountain forests contain great drooping cedars and stately yews, as well as unusual specimens like the *Hagenia abyssinica* with pink flowers which hang like gigantic bunches of grapes. Everything is gigantic, even to the heather and the mountain thistle. Coffee is of particularly good quality. Rubber, tobacco, bananas, rice, grapes and wheat are grown, and flax may one day be an important item of export.

In northwestern Ethiopia the Blue Nile (the Abbai) takes its rise, at Lake Tana. The river canyon has walls five thousand feet deep at one place.

The population is exceedingly varied,

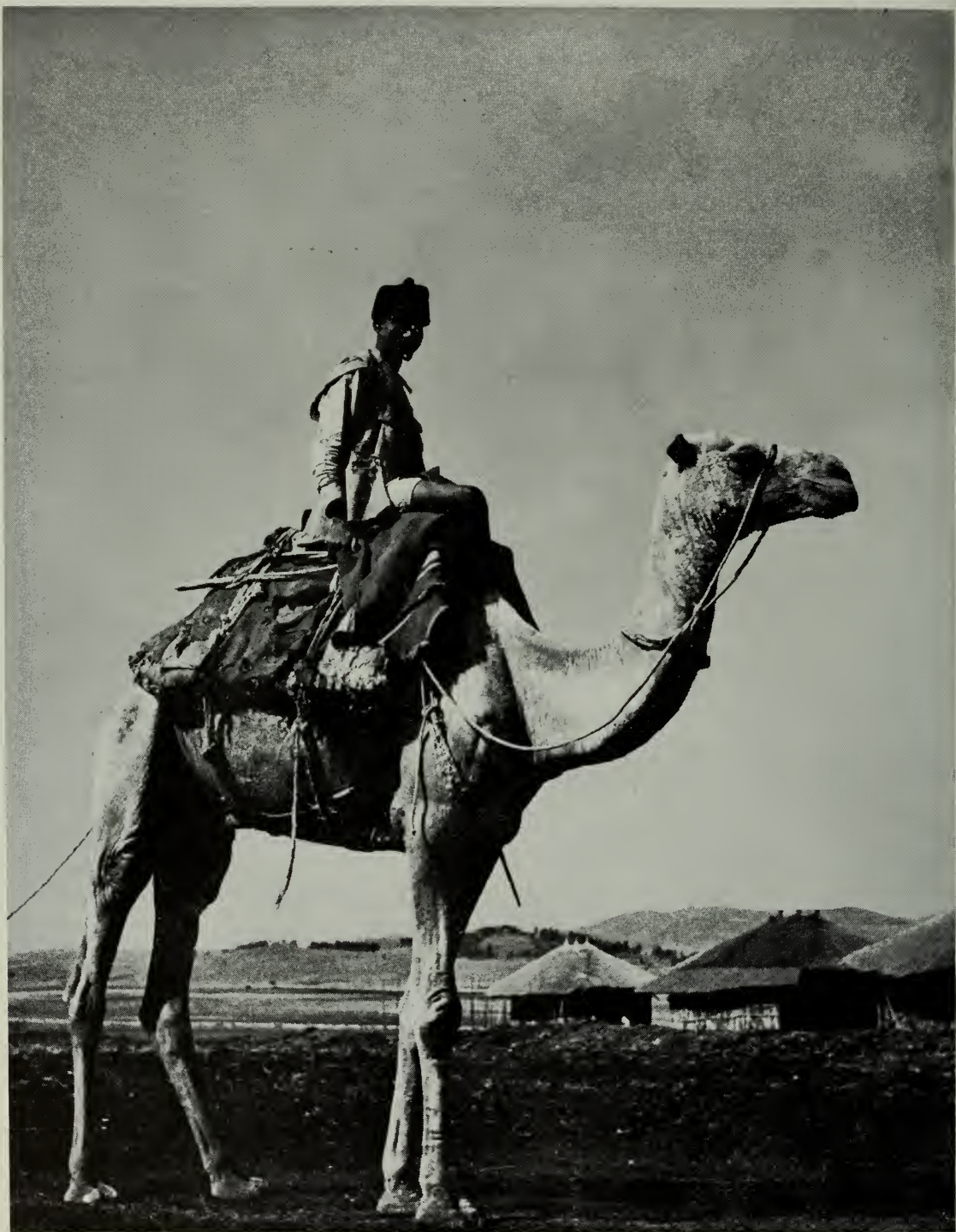
some seventy racial stocks being distinguished. These may be grouped in three major divisions: the original Hamitic peoples, the Semitic element and the Negro tribes. There is considerable intermarriage and the skin color varies from light chocolate to a deep black.

Christianity probably reached Ethiopia in the fourth century. The form still practiced is the same as the Coptic Church of Alexandria. There are, however, many pagan tribes and a considerable number of Muslims, who once scornfully called the Christians *habeshi* (mixed). From this the name Abyssinia arose. The people, however, have clung to the older name of Ethiopia for their country.

There is only one large city in the Western sense of the term. Addis Ababa, the capital, boasts about 450,000 people. It has an elevation of over eight thousand feet, which gives it quite cool nights. Down the roads come swaying camel caravans from the interior of Africa, jostled by automobiles. Cattle, sheep, dogs and chickens also make frez of the main highways by day; at night the howling of hyenas shatters the silence.

Liberian Background

Liberia cannot match Ethiopia's long record of independence, but it is still quite old as African nations go. In 1822 a group of Christian Negroes embarked for western Africa. On arrival they made a



BLACK STAR

A PRECARIOUS PERCH HIGH ON THE HUMP OF A CAMEL

Camels have a lurching gait, and it requires considerable agility for a rider to keep his seat. The one-humped, or Arabian, camel is a fairly common sight in the interior of Ethiopia.

bargain with some local chieftains for a strip of coast. The newcomers were freed slaves from America who had been helped to immigrate to the African coast by the American Colonization Society which had acquired the location for the purpose. The first group settled in Providence Island at the mouth of the Mesurado River, and it was followed by many more, aided by the same and other philanthropic organizations. From 1822 to 1867 nearly six thousand free Negroes were transported to the section known as Liberia. The name was coined from the Latin word *liber*, meaning "free."

A Land of the Free

In 1847 the colonizing effort became the Free and Independent Republic of Liberia. Twenty years later it annexed additional territory, the tiny Republic of Maryland. Liberia's capital, Monrovia, was so named for President James Monroe of the United States. The United States has always had a great deal of influence in Liberia, and United States currency circulates freely. English is the official language.

Liberia's form of government is very similar to that of the United States. Its constitution provides for a president, a cabinet and a two-chambered legislature. Both men and women have the right to vote.

The flag is red, white and blue—red and white horizontal stripes and a blue field in the upper left-hand corner bearing a white star.

A Tropical Climate

Liberia's 350 miles of shore extends along the South Atlantic Ocean from the Ivory Coast to Sierra Leone, and the small country runs at the most about 200 miles inland. The climate is tropical, with frequent and heavy rainfall and persistently high temperatures.

It is a land of dense forests where no cold season ever checks the heavy undergrowth. Roads along the coast degenerate into jungle tracks as they approach the heavy bush. There are also grassy tablelands and hills in the interior.

Of its thirty-odd rivers, only a few are really navigable, and even they can accommodate only shallow-water craft. The St. Paul furnishes about twenty miles of waterway and the Kavalli eighty miles. The seaports, in addition to the capital, are Marshall, Robertsport, Buchanan, Greenville and Sasstown.

Influence of the Colonists

The Liberians—that is, the Negroes of American descent—are estimated to number as many as twenty thousand, but they form only a small part of the total population. They live chiefly along the coast, for when they first settled there it was unsafe for them to go inland without an escort. Many of the inland tribes hated them as interlopers.

However, their higher living standards and their schools have reached many thousands of their neighbors since the first colony was founded. The Liberian Government provides elementary, high and technical schools, and Christian missions maintain many more. Liberia has two universities.

The Earliest Residents

The first colonists found a wide variety of Negro tribes living in the area, each with its own distinct culture pattern, many of the men and women of strong, handsome appearance. Among these were the pagan Kru tribes, the Mandingos, who are Mohammedan, and the Kpwesi; and there are many others.

The Krus live on the coast and are seafaring folk. For centuries they have hired themselves out as sailors on European ships.

The Mandingos live on the inland grassy plateau where they raise cattle and crops. They have Arab blood in their veins and they dress picturesquely in flowing white robes and flat slippers. They are successful missionaries of their Moslem faith, and in this work they have done a good deal with those Liberian tribes in the remote depths of the jungle who were once cannibalistic.

Most of the other tribes live in the dense interior with lower cultural levels.



BLACK STAR

A PRETTY YOUNG WORKER IN A MATCH FACTORY IN ASMARA

The matches are held tight and separated in a framework so that the tips will not ignite accidentally. Asmara is the capital and chief town of Eritrea, which is joined to Ethiopia.



A PORTION OF THE VAST INLAND PLATEAU REGION OF ERITREA

The coastal area of Eritrea is hot and humid. The broad, inland plateau regions, however, have a temperate climate at 6,000 feet and are quite cold at their highest altitude of 9,000 feet.



PHOTOS. BLACK STAR

MODERN TRANSPORTATION METHODS FIND THEIR WAY TO ERITREA

Busses are still a novelty in some parts of Eritrea, as the roadside audience would seem to indicate, but they are rapidly becoming the accepted means of transportation even in the hinterlands.



NURSERY FOR OIL PALMS NEAR MONROVIA

Oil palms grow well in the rich soil of Liberia, and palm oil finds a good market abroad. It is used for lubrication and in cosmetics and soap; and in some parts of the world in cooking. In this nursery young plants are grown from selected seed (the parent plants pollinated by hand). Each year several thousand baby palms are distributed to planters from the nursery.



PHOTOS, U. S. STATE DEPT.

A LESSON IN THE CABBAGE PATCH

A teacher from a United States economic mission shows the proper method of setting out cabbage plants to students who are being trained to serve with the Liberian Department of Agriculture's Extension Division. They will teach farmers better ways to work the land, explaining up-to-date, scientific methods such as diversification of crops to preserve fertility of the soil.

LIBERIA AND ETHIOPIA

The most powerful tribe of Liberia is the Kpuesi. They are hunters and warriors and, contrary to the usual native mode of waging war, they disdain ambushes, but charge straight at their foe in mass formation. They use bows and arrows for hunting but fight only with long knives. They are a musical race and, besides beating the inevitable tom-tom, play such instruments as the harp and the flute. They are also expert in various crafts.

The hostility that the inland tribes used to show toward the descendants of the freed slaves has diminished in recent years. Better feeling has come about from the attempts of the Government, traditionally controlled by the coastal inhabitants, not only to consider the interests of inland tribes but also to give positions in the government to people from the interior.

Monrovia, the capital of Liberia, is

built on the shores of a lagoon. It is divided into five long streets which rise one above the other parallel to the water front. Signs of contact with the West may be seen in the markets where jazz records and comic books are sold beside food and clothing. Cars and trucks rattle over the dozen or so streets in Monrovia, fighting their way through groups of carts and herds of cattle. The clothing varies from robes and ragged shorts to cotton dresses and cord suits. It is the site of the University of Liberia, one of four colleges in the country. Although there is no censorship of the press the Government controls the largest newspaper. There are many slums, but the capital also boasts some luxurious homes. Designed for the tropics the houses usually have balconies and piazzas similar to those attached to houses in the southern United States, and the gardens are gay with scarlet hibiscus.

LIBERIA AND ETHIOPIA: FACTS AND FIGURES

LIBERIA

Republic in West Africa, bounded on north by French Guinea, on the east by Ivory Coast, on the south by the Atlantic Ocean and on the northwest by Sierra Leone. Executive power is vested in a president and Cabinet; legislative power in a Senate and House of Representatives. Area, about 43,000 sq. mi.; total population estimated at more than 1,500,000. Agricultural, mining and industrial development slight. Chief exports are rubber, palm kernels, palm oil and raw gold. Leading imports are textiles, foods and beverages, petroleum and coal, machinery and motor vehicles. Monetary unit, the United States dollar. Railways, 40 mi.; all-weather roads, 800 mi.; telephones, 621. There is one major airport. For the most part, Americo-Liberians are Protestants. The government educational system is supplemented by mission schools. There are 600 schools and 1 university. Capital, Monrovia, 50,000.

ETHIOPIA (ABYSSINIA)

Country in eastern Africa. Area (including Eritrea, former Italian colony, federated with Ethiopia in 1952), 457,000 sq. mi.; population, 16,000,000. The 1955 constitution introduced universal suffrage. The lower house of Parliament is elected by popular vote; the emperor can veto legislation, dissolve Parliament, ap-

point judges and cabinet ministers. Primitive agricultural methods limit output. Chief crops: durra and teff, coffee, oilseeds, sugar cane, tobacco, cotton. There are large herds of cattle, sheep, goats. Forests yield valuable woods. Chief minerals: salt, gold, platinum. Exports: hides, skins, coffee, oilseeds. Imports: textiles, petroleum products, motor vehicles. Monetary unit, the Ethiopian dollar. Railways, 612 mi.; roads, 7,000 mi.; telephones, 8,500. There is one airline. The Ethiopian Orthodox Church is the state church. There are government schools and Coptic Church schools. The capital has 6 secondary schools, 2 teacher-training schools and several technical schools. Addis Ababa (capital), 450,000; Asmara, 120,000; Dessye, 50,000.

SOMALIA

Country on the eastern coast of Africa, was administered by Italy as a UN trusteeship until 1960, when independence was granted. The Government is based on the parliamentary model. A 90-seat legislature elects a prime minister with executive powers. Area, 198,275 sq. mi.; population, 1,269,000. Chief industries: cattle raising and farming; leading exports: skins, livestock, bananas. Roads, 7,000 miles. Capital, Mogadishu, 85,000. Since 1960 it also includes former British Somaliland.

Emerging African States

AFRICA is rapidly being turned back to the Africans, ready or not. At the end of 1960 almost two thirds of the continent's total population of 230,000,000 was under independent African governments. To a large extent the areas long under British control have set the example. (This is aside from the Union of South Africa, discussed elsewhere.) For of all the old colonial powers, Great Britain, regardless of the political party at the helm, has had the most flexible policy since the end of World War II. In general, instead of resisting the prevailing current, Great Britain has taken the lead in granting ever more self-government to the Africans. (Thus far all the British areas, regardless of status, have remained within the Commonwealth.) In 1960 Colonial Secretary Iain Macleod declared, "As time goes on, Africans . . . will be in the majority position and their voice will be the predominant one."

At the same time, many problems hamper these areas similar to those mentioned in the chapters "Sub-Sahara Africa" and "Congo Basin." In the cool highlands of East Africa and the fairly temperate climate toward the south, another factor aggravates the difficulties of transition from colonial to self-governing status. This is the presence of relatively large numbers of white settlers, to whom Africa is home. Tropical West Africa has always been too hot and damp to attract much permanent European settlement. The absence of African-white conflict there explains in part why Ghana

and Nigeria were among the first British territories to achieve independence.

However, there are many variations on the basic theme. Suppose we take a closer look, bearing in mind that there is space for only a brief survey here, beginning with West Africa. In tiny Gambia the right to vote was extended to all adults in the colony, in 1959. Sierra Leone has an all-African Executive Council including a prime minister. It is slated for complete independence in 1961. Recently a lucrative resource has been discovered there: a large field of industrial and gem diamonds.

Ghana (the former Gold Coast) became independent in 1957 and a republic in 1960. Of all the new African states it is the most advanced—in education and income per person. It is also a rival for leadership of black Africa and leans toward the idea of union with other states. Nigeria, which won independence in 1960, is making an equally dynamic bid for leadership. However, as a very large country and the most populous of the new states, Nigeria is inclined to scorn union with others. (Rather than join Nigeria the British Cameroons preferred to remain a UN trust territory for the time being.) It has the task of getting its own three distinct regions to co-operate. There are differences between the urbanized Yoruba of the Western Region and the poorer Ibo of the Eastern Region. In turn, they share dislike of the extremely conservative Northern Region, 75 per cent Muslim, though this is where

... former British territories

half of the Nigerians live. As one result the first free Government was an uneasy coalition. Signs of the new Africa are plentiful. Since 1959 television has practically blanketed Nigeria. One political candidate did his campaigning by helicopter.

On the "horn" of Africa (across the Gulf of Aden from the Arabian Peninsula) the British protectorate of Somaliland became free in July 1960. It then united with the new and neighboring nation of Somalia. (This was formerly Italian Somaliland, which became a UN trust territory after World War II.)

By 1965 there may be a Union of East Africa made up of Kenya, Uganda and Tanganyika. Meanwhile, Tanganyika (a UN trust territory) gained self-government in all but defense and foreign relations in 1960. It has the largest cooperative movement in all Africa: 546 societies with 318,900 members in 1959. Progress in Uganda is crippled by tribal conflicts. The Buganda, the dominant people, who have their own king, consider the other tribes inferior. They prefer a federation instead of a unified government for Uganda as less disturbing to their favored position. They threatened to boycott the Uganda elections scheduled for February 1961.

In addition to tribal friction and contention among African political parties, Kenya is faced with the crucial problem of white settlement—about 60,000 of them as opposed to 6,000,000 Africans. There is considerably less hostility, how-

ever, than in the Union of South Africa. The whites fear most the possible loss of their heavy investment in the country. As the result of constitutional changes, Africans will dominate the government by 1961.

The clove-scented island protectorate of Zanzibar, whose nominal ruler is a sultan, is also shuffling into step. At least in 1959 giving women the right to vote was being considered.

The Federation of Rhodesia and Nyasaland, established in 1953, has never been a comfortable union. Its prosperity depends to a large extent on Northern Rhodesia's mineral wealth, in the copper belt. Otherwise, Northern Rhodesia, as well as Nyasaland, is poor and undeveloped. They never did want federation. Southern Rhodesia, on the other hand, is industrially advanced and has a large, firmly entrenched white population. The more extreme elements in it sympathize heartily with the Union of South Africa's policy of discrimination against the Africans. Violence flared in the federation in 1959. Since then the Africans of the north have been demanding an end to the federation and immediate independence. The constitution was to be reviewed late in 1960.

Landscape and Resources

The coast of Nigeria is fringed with swamp, where dense thickets of mangroves choke the water. It is here that the Niger River, nearing the sea, fans out into a broad delta, its waters separating into



BRITISH INFORMATION SERVICES

TIMBER cleared from the mangrove swamps of Sierra Leone is used as fuelwood. It takes considerable strength to lift the heavy logs.

hundreds of rivers, creeks and lagoons. Actually the delta occupies much of the low-lying plains of the coast. From these alluvial plains the land rises gradually to the low plateau of western Africa. It is fairly flat, though many little granite hills rise above the general level, the Jos Plateau to 6,000 feet. Along the eastern border, the uplands reach their highest point in Mount Cameroon, a huge volcanic peak towering 13,350 feet above sea level. As the land slopes up, it passes first through a broad belt of thick rain forest. Beyond lies the savanna, which covers about two-thirds of the country. Open woodland, with poor grass, alternates with parkland, where trees are widely scattered. On the northern boundary, thorn scrub takes over.

Most of West Africa is hot, and the south of Nigeria is both hot and wet the year round. Rainfall gradually lessens with distance from the sea, however, and northern Nigeria is very nearly desert.

In the mangrove swamps, almost impenetrable, only a few fishermen live, their



EWING GALLOWAY

FOUNDED IN 1788 as a home for freed slaves, Freetown, the capital of Sierra Leone, has the best natural harbor of Africa's west coast. It is also a naval coaling station.

huts perched insecurely on low mud banks. Nevertheless, the country's major ports, Lagos and Port Harcourt, are located in this zone. There are railroads from these cities northward to Kano and other towns.

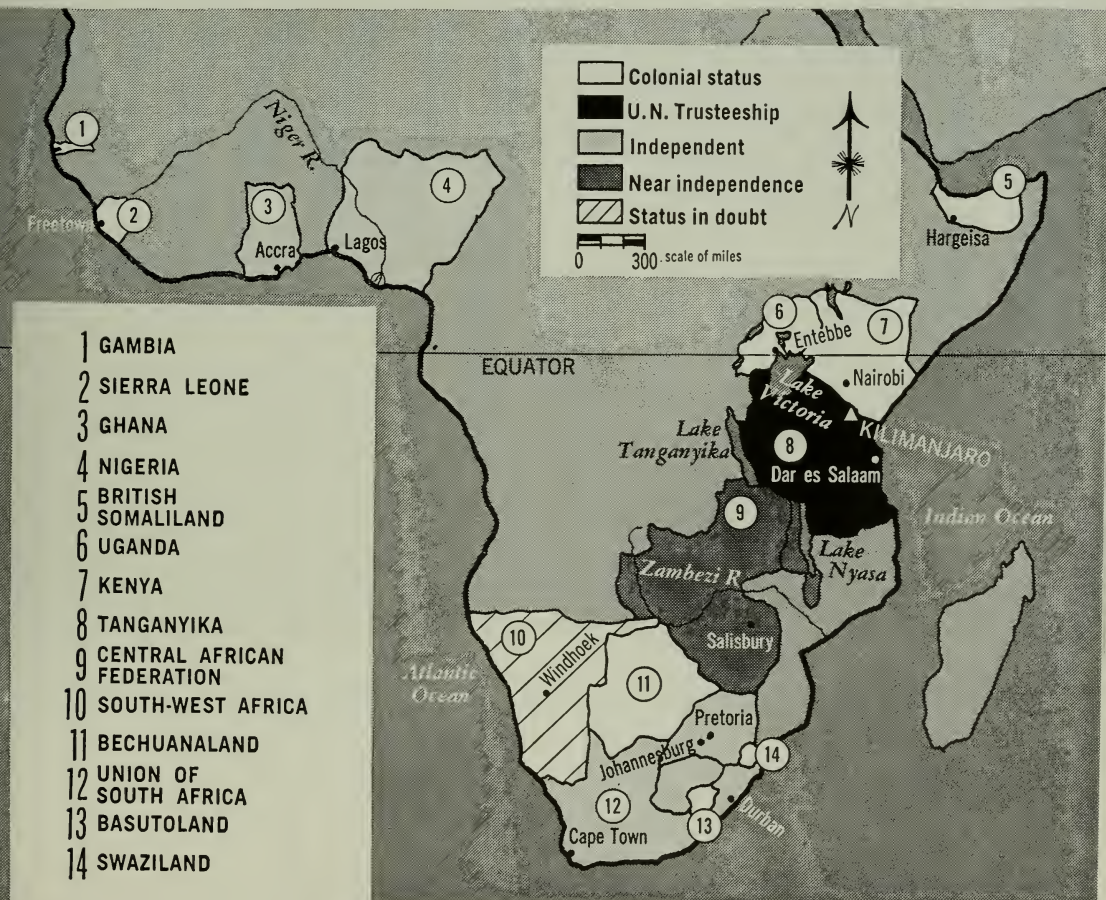
The hardwoods of the rain forest supply a thriving lumbering industry. Where the timber has been partly cleared, the oil palm flourishes. Palm oil is Nigeria's most valuable export. The most productive area is in the densely settled east, the home of the Ibo tribe. The Ibo are intelligent and alert and are making great strides in education.

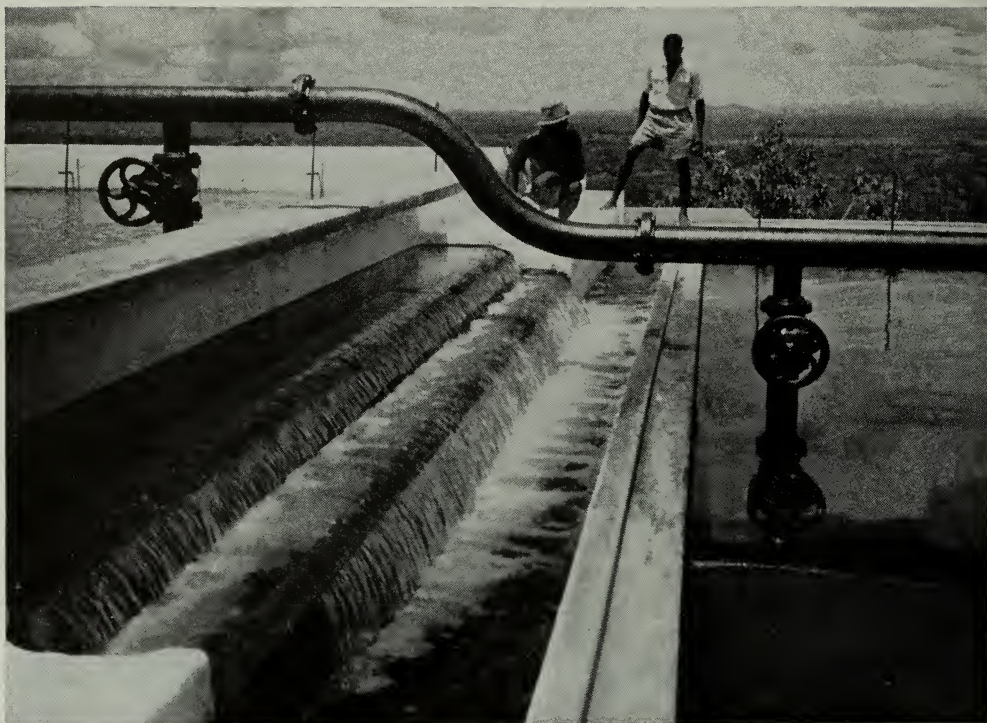
In southwest Nigeria live the Yoruba, who have long been among the most progressive of African tribes. In contrast with the Ibo, they already had a highly developed tribal organization when the Europeans arrived. The Yoruba are town dwellers by preference. Many live in Ibadan, which has a fine university. The Yoruba who are farmers, however, produce most of the cocoa grown in Nigeria. Because of the poor, leached soils, they

and other farming tribes are forced to practice a shifting agriculture. When one plot is exhausted, in two to five years, they must clear another in the forest and permit the old one to recuperate, which may take twenty years.

The savanna of the north provides good grazing for cattle and goats. Where this land is farmed, the chief crops are millet, sorghum, peanuts and cotton. Most northern Nigerians are Moslems; and the Hausa form the largest of the Moslem tribes. The Hausa grow most of the peanuts that are shipped abroad in large quantities. These people are also noted craftsmen, especially in metal and leather, and traders. Kano, which has a Moorish air, is the Hausa city. Built on the site of an older town, the present Kano dates from the 1500's. It is surrounded by a high, thick wall and has one of the liveliest and most picturesque markets in Africa.

The second largest Moslem tribe is the Fulani. Originally the Fulani were all wandering herdsman. Today, however, only the "cow" or bush Fulani proudly





WEIJA WATERWORKS are a boon to the Ghana seaport of Accra. The city is hardly more than five degrees north of the equator, and irrigation is necessary during the dry season.



PHOTOS, BRITISH INFORMATION SERVICES

SUN-DRYING COCOA BEANS, near Tafe, a town in Ghana. The workmen move the beans around on trays to speed the drying. The bean pods are green, but turn brown in the sun.



BRITISH INFORMATION SERVICES

NIGERIAN COTTON has a short fiber but otherwise is excellent. Nigeria's textile industry is expanding, and many factory owners are growing their own cotton on the spot.

carry on the old nomadic life. They will neither eat meat nor willingly part with any of their cattle. The animals are kept for their milk and hides. "Settled" Fulani combine their interest in cattle with farming. Their circular mud huts with thatched roofs are more sturdily built than the temporary homes of the bush Fulani. "Town" Fulani are descendants of the Fulani who conquered the Hausa in 1804. They have largely adopted Hausa customs, dress and language.

Strewn over the Jos Plateau stand the simple villages of hill tribes, with tilled fields here and there. The hill people are small of stature, and wear a few leaves or nothing at all.

Nigeria has a few minerals: coal at Enugu, tin and columbite at Jos. The last is a complex ore, used in aircraft construction. An extremely precious ore, of uranium, has been found near Kano.

Ghana, Free Nation

Like Nigeria, the land surface of Ghana slopes upward, with a coastal lowland, a forest belt and open parkland in the north.

Rainfall and plant life also follow very much the same pattern. Practically the whole of Ghana is drained by the Volta River.

The lowlands are rather drier than is usual along the Gulf of Guinea. Accra, the capital, lies here. It is a "surf port." Vessels anchor in the open sea several miles offshore, and cargo is lightered on long boats propelled by twelve paddlers. It is an exciting spectacle to see these boats negotiate the heavy breakers.

Twenty miles east of Accra, a new port, Tema, eventually will replace the slow and dangerous surf-loading at Accra.

The political divisions of free Ghana follow the natural separations of the land into coast, forest and parkland: coastal area proper, the Ashanti "kingdom" in the center and the Northern Territories. Ashanti is the Land of the Golden Stool. There is a real stool, which outsiders think is probably only gold-plated. In any case, it is the throne of the Ashanti king, or chief, who may be "enstooled" or "destooled," as a European king is enthroned or dethroned. The stool is also a sacred



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DRIVE-IT-YOURSELF in northern Nigeria. A donkey wearing an easy-chair type of saddle can be hired from the park "taxi" stand in Kano, a market town serving a large district.



BRITISH INFORMATION SERVICES

AFRICAN WORKERS descend into an excavation in northern Nigeria to refill their head pans with columbite, a mineral needed to make special steels for building aircraft.

object, as it is considered the soul of the Ashanti people.

The greatest wealth of the whole of Ghana lies in the hilly, forest area of the Ashanti. There the cocoa tree thrives, and the country is the largest supplier of cocoa in the world. In fact, the bean has made Ghana extremely prosperous by African standards. Every cocoa farm is owned by Africans.

The forest also yields the prized hardwood mahogany; and in the verdant hills there are gold, manganese, diamonds and bauxite. Only the Soviet Union exports more manganese than the Ghana area; and the bauxite deposits are enormous. To extract aluminum from bauxite, however, requires tremendous amounts of electricity. The Volta River is being harnessed to supply the necessary power.

For many years the dry, remote Northern Territories were almost forgotten, inhabited only by rather primitive tribes. They lived on the rolling savanna in baked-mud huts and worked the land only for their own needs. However, modern mechanical agriculture is moving into the area. Farmers and their families from overpopulated districts elsewhere are being resettled there, to produce more food for all of Ghana.

Sierra Leone Is Founded

Sierra Leone was founded in 1787, nearly fifty years before the abolition of slavery by Great Britain, as a settlement for freed slaves. It is the oldest British colony in Africa.

Though vast mangrove swamps also guard this coast, Freetown, port and capi-



CARL HENRICH FROM BLACK STAR

HOUSECLEANING presents no problems in Nigeria. When the floor becomes dirty, neighbors simply lift the grass house and carry it to a new and cleaner location.



THE EMIR'S PALACE in Katsina, a town in northern Nigeria which was the cultural center and capital of an ancient Hausa state that flourished during the fourteenth century.



PHOTOS, BRITISH INFORMATION SERVICES

CLAY WALLS encircling Kano are pierced by more than a dozen gates. The walls, which are now falling into decay, were originally built for the defense of the Nigerian city.

tal, has the best natural harbor in West Africa. A winding, narrow-gauge rail line runs east from Freetown almost all the way across the country.

Most of the people are farmers who raise only enough food for themselves. They add to their income by producing or collecting palm oil or kernels, piassava fiber, ginger, kola nuts, cocoa and coffee. A major effort is being made to increase the production of the staple food, rice, by clearing the swamps for paddies.

Minerals are abundant in Sierra Leone, especially iron ore and diamonds. Some exceptionally large diamonds have been found. One weighing 770 carats is thought to be the largest stone ever taken from an alluvial deposit.

The Valley of the Gambia

Gambia is only a narrow strip stretching inland about two hundred miles along both sides of the Gambia River. The waterway is navigable to the eastern border, 292 miles upstream from Bathurst,

the capital. Like Sierra Leone, Gambia has an extremely hot, unhealthy climate. Malaria is rife.

Gambia is practically synonymous with peanuts, for the crop occupies the largest acreage and provides almost the only export of the territory. Because of the easy transportation provided by the river, many "strange," or migrant, farmers come into Gambia from nearby territories each year simply to raise a crop of peanuts.

British East Africa

The territories usually called British East Africa are Kenya, Uganda, Tanganyika (a UN trusteeship) and the Zanzibar Protectorate. This area is part of "high Africa," a great uplifted land mass stretching from Ethiopia southward into the Union of South Africa. Steep scarps, or cliffs, rear from the coast and at irregular intervals on the plateau. Mighty rivers drain inland. Through this area runs the Great Rift Valley, a tremendous depression in the earth's crust that extends all



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BROAD-BEAMED CANOES bring traders and their wares to Bathurst. The capital of narrow Gambia is situated on sandy St. Mary's Island near the mouth of the Gambia River.



IN KENYA, archaeologists are unearthing the ruins of Gedi. The forgotten city, near Malindi, may have been built by Arabs who moved to East Africa late in the twelfth century.

the way from Syria to Mozambique. It is not a single trench but splinters into a vast system of steep valleys. Long, deep lakes nestle in these rifts; and great volcanoes, some still active, rise from them. Lake Victoria, as large as Scotland, lies on the plateau between the two main rifts.

The narrow coastal zone of all British East Africa is hot, humid and unhealthy. In the highlands, at 5,000 to 9,000 feet above sea level, however, the climate is temperate and attractive to people who are used to cool lands. Most of the area has two rainy seasons; but too little rain and great changes from year to year in total amount are the usual rule.

Land of the Shining Mountain

Kenya, Land of the Shining Mountain, lies astride the equator. Yet glaciers gleam among the peaks of Mount Kenya. It is the second highest mountain in all Africa, soaring boldly above the plateau



PHOTOS, BRITISH INFORMATION SERVICES

MASAI WARRIOR of British East Africa. Plaited hair is the mark of a fighting man. However, the Masai are peaceful today.

to a height of 17,040 feet. Between 5,000 and 12,000 feet, its slopes are thickly forested with cedar, camphor and bamboo.

The great "shining mountain" is in south-central Kenya. To the southeast and northeast are arid plains, where little but thornbush thrives. Few people live on these plains, though some farming is carried on in the southeast where water is available. Only occasional herdsmen wander in the northeast. The northwest section is also rather dry and low, though the monotony of the landscape is broken by several mountains and the dark waters of Lake Rudolf in the eastern rift valley.

It is in the southwest part of Kenya that about 85 per cent of the people live. Here are the cool Kenya Highlands, sloping up to ten thousand feet, from which still higher peaks and ranges thrust toward the sky. The highlands are one of the few places in tropical Africa where white settlement has been successful. Farms owned by Europeans produce a high percentage of the commercial crops and livestock of Kenya. Africans, however, make up 97 per cent of the total population. Out of the remainder, besides Europeans, there are immigrants from India and their descendants—who do much of the store-keeping, clerical and artisan work—and Arabs.

Though Kenya is largely agricultural, less than a quarter of its area is suitable for cultivation. On European farms, wheat, corn, sugar cane, tea, sisal, pyrethrum (used in insecticides) and coffee are grown. The Europeans also produce milk, butter and beef. Africans are largely subsistence farmers (raising only enough for themselves) and provide labor for the European farms. On their own plots they raise corn, sorghum, millet and beans, the staples of their diet.

Safaris Start from Nairobi

Nairobi, capital of Kenya, is British East Africa's largest city. In the midst of big-game country, it is an outfitting center for safaris. Nearby Nairobi National Park is a game reserve—lions, hippopotamuses, giraffes, antelopes. The capital is on the Kenya-Uganda Railroad,

which connects it with Kenya's main port, Mombasa. In its fine harbor, modern vessels and Indian dhows ride at anchor in striking contrast. Originally an Arab and Persian settlement, Mombasa still has an Oriental air.

Soil erosion, overgrazing and overcropping are problems common to both African and European areas. The greatest trouble in the 1950's, however, was the savage Mau Mau revolt. The members of this secret society are drawn almost entirely from the Kikuyu tribe, the largest and generally most advanced African group in Kenya. The root of the problem is land hunger, intensified by superstition and racial friction. By terrorizing the white settlers, the Mau Mau hoped to drive them out. Murder stalked the Europeans and the Kikuyus who remained loyal. Yet the white people to whom Kenya is home are determined to stay.

Uganda's Lakes and Mountains

Uganda lies west of Kenya and on the northern shores of Lake Victoria. Here the East African plateau rises from 3,000 to 6,000 feet. On the western frontier with the Belgian Congo, however, is a deep rift valley, partly filled by the waters of Lakes Albert, Edward and George. Rearing up from the valley are the snow-capped masses of the Ruwenzori Mountains—the "Mountains of the Moon" of old legends.

The White Nile begins its journey northward from Lake Victoria. Just below the outlet from the lake, at Jinja, the river drops slightly (about sixteen feet) to form Ripon Falls. A mile and a half farther down is the eighty-five-foot-high cascade of Owen Falls—which Africans call "sounding smoke." In April 1954, Queen Elizabeth opened the great Owen Falls Dam. It provides cheap electric power for Uganda, which has no fuel, and also makes more water available for the Sudan and Egypt.

Elephants and buffaloes are found almost everywhere in Uganda; and the rivers and marshy lake shores harbor crocodiles and hippos.

There are almost no white settlers in



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A CHIEFTAIN OF GAMBIA presides over his court with the dignity and pomp of the kings of old. The crown, resembling the British crown, is of gold, studded with precious stones and mounted on ermine and velvet. By not wearing a shirt he reminds his people that he has the strong shoulders and arms of the hunter and fighter.



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KIPSIGIS WOMEN of southwestern Kenya. For a ceremonial dance, they wear an odd combination of tribal attire and European dress—monkey fur, woolen stockings and cotton prints.



BRITISH INFORMATION SERVICES

DELAMERE AVENUE, one of the principal thoroughfares in Nairobi, capital of Kenya. The statue is of Lord Delamere, who helped to develop Kenya in the early twentieth century.

Uganda, and the fertile soil is cultivated by Africans. Cotton and coffee are the most valuable cash crops. Bananas are grown for food in the rather wet area around Lake Victoria. Toward the north, grains are the chief food crop.

One of the most highly developed tribes in Africa is the Baganda. They occupy about one-fifth of Uganda, just north of Lake Victoria. Their territory is called Buganda; their language, Luganda; and a member of the tribe is a Muganda. When the Europeans arrived, the Baganda already had a well-developed political system. The British have continued to govern the land through the kabaka, or king, and his lukiko, or council.

Buganda is a region of innumerable

flat-topped hills. On the lower slopes are the homes of the people, set among banana trees. Farther below lie the fields of cotton. Many of the Baganda own livestock, which they tend with care.

Another interesting group, the Bakiga, inhabits the hilly country to the southwest. They are intelligent farmers and understand the need to keep the soil from being worn away. Their hill slopes are beautifully contoured.

Uganda is not an important producer of minerals, though a large copper mine has been developed in the Ruwenzori Mountains. Industry had not developed far beyond cotton gins and sugar mills until the Owen Falls Dam was built. Manufacturing is now bound to grow.



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IN KENYA COLONY, it is the custom for a man to buy his wife from her father. This Kikuyu man had to pay eight cows, ten goats and twenty jars of native beer for his bride.



THOMAS

NIGERIAN CHILDREN, like these little girls, wear few clothes, even when dressed in their best. Their heads were bound when they were babies and grew into this unnatural shape.

The chief towns of Uganda cluster around Lake Victoria. Entebbe, the administrative center, has botanical gardens, a technical school and an airport. Kampala is the chief business city and the site of Makerere College. On the outskirts is Mengo, headquarters of the native government of Buganda.

Bush-clad Tanganyika

Tanganyika, a United Nations trusteeship governed by Great Britain, is largely undeveloped. The dry highlands are clad mostly in bush; and the people are among the most magic-riden on the whole continent. Most of them are Bantu, though there are Masai and other Hamitic tribes to the north. As elsewhere in East Africa, Swahili is the lingua franca—the tongue used for business transactions.

The fairly wide coastal plain of Tanganyika is dotted with sisal plantations. In fact, the strong fiber is the major export. On this coast is the capital and chief seaport of the Indian Ocean, Dar es Salaam. The name means "haven of peace." Once the harbor was almost landlocked; but today it has modern, deep-water berths. From the port, a railroad extends across the country to Lake Tanganyika.

Behind the coastal zone the country rises gradually to the plateau. This is sliced through the middle by the eastern rift valley; and on the western border, the waters of Lake Tanganyika fill another trench.

The glory of Tanganyika is Mount Kilimanjaro (19,565 feet), Africa's highest summit. It is in the northeast, near the Kenya border. In the same region are another extinct volcano, Mount Meru, and the active cone of Mount Lengai. At the base of these mountains, lions are the goal of big-game hunters.

There are about two hundred distinct tribes in Tanganyika. Some of these people are settled farmers who grow corn, sorghum, rice, beans, cassava and peanuts, mostly for local consumption, and cotton, coffee and tobacco for export. Often land is worked with only a hand hoe.

A notable exception to this primitive agriculture is that of the Chagga tribe. They grow much of the coffee on the rich soil of Kilimanjaro's slopes, and have a well-developed co-operative organization for marketing and supply.

Other Tanganyikan tribes are pastoral, with huge herds of cattle, sheep and goats. Were it not for the tsetse fly—which carries a parasite deadly to cattle and is still a curse in tropical Africa—the pastoral tribes would be more widely spread. Most famous of these groups is the Masai, who have a 41,000-square-mile reserve, partly in Kenya. They live mostly on meat, milk, and blood drawn from the living animal. A blanket slung over the shoulder serves them for clothing. The warriors smear their bodies with red ochre and fat, and arrange their hair in clay-stiffened pigtails.

Diamonds are Tanganyika's most valuable mineral. The mine near Shinyanga, in the northwest, is said to be the most productive in the world.

Clove Islands—Zanzibar

The Zanzibar Protectorate consists of the two little islands of Zanzibar and Pemba, separated from the Tanganyika coast by the twenty-mile-wide Zanzibar Channel. Zanzibar itself is Africa's largest tropical island; and the harbor of the town of Zanzibar is one of the best in the world. It has long been famous for its supply of apparently inexhaustible fresh water.

For two thousand years the islands have been familiar to Arab mariners; and they are governed today through a sultan. The population, nevertheless, is about 80 per cent African. Narrow, winding streets, whitewashed mosques and open shops give the town of Zanzibar an Arabian Nights appearance. The yearly trading visit of gaily painted dhows from Arabia is a thrilling sight. As many as three thousand of these vessels come on the winter monsoon and return with the summer winds.

The islands are so fertile that although they are densely populated "starving requires an effort of will." Every bit of

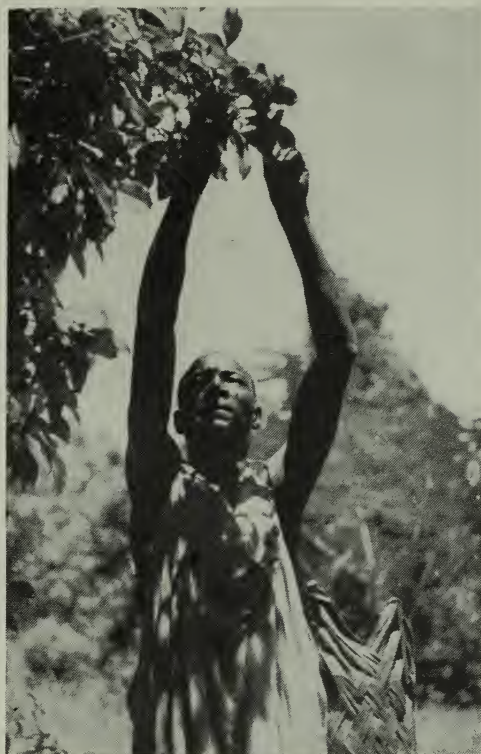
land is cultivated. Cloves, however, are Zanzibar's most valuable and most famous product. If the wind is in the right direction, the spicy fragrance of the groves can be detected a mile out at sea.

Home of Somalis

British Somaliland is on the eastern "horn" of Africa, edging the Gulf of Aden. In their hot, dry, barren land, the Somalis eke out existence by raising camels, sheep, goats and cattle on the interior plateau. The torrid coastal plain, called *Guban* (meaning "burnt"), is shunned except for a few ports. In the mid-1950's it was planned to sink many more wells to improve the water supply and to extend the small irrigated area.

The Fertile Seychelles

About a thousand miles due east of Kenya lie the ninety-two little islands that make up the crown colony of the Seychelles and dependencies. The central group, the Seychelles proper, are masses of granite with mountainous backbones. The outlying islands are flat and formed of coral. Centuries ago all the islands were uninhabited and were a haven for pirates of the Indian Ocean. The people



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PICKING RIPE CLOVES on a plantation in Zanzibar, which is truly a "spice island," lying twenty miles off the coast of Tanganyika.



BLACK STAR

FLOWER BUDS of the clove tree in just the right state to harvest. The spice is the dried buds. Oil also is obtained from the tree, for use in medicine and perfume manufacture.



A MASAI WOMAN should have the lobes of her ears stretched until they will meet over her shaved head. Her stone ear plugs, ear-rings and other ornaments, including many pounds of iron wire around her neck and arms, she may not remove during her husband's lifetime.



NANA PREMPEH ruled over the Ashanti, now part of the Gold Coast, until 1896, when he resisted British rule, was defeated and exiled. When the British established the Federation of the Ashanti in 1935, his nephew, Otuo Sir Osei Agyeman Prempeh II, was placed at its head.



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THIS WANDERING DERVISH of north-central Africa carries a polished gourd as a begging bowl. Dervish is Persian for “seeking doors” or begging, and in Islam generally implies membership in a religious fraternity. Members are distinguished by their garb. Each has its ritual, which may include whirlings and the self-torture of the howlers.



EWING GALLOWAY

AFTER A RAIN in Dar es Salaam (haven of peace), capital and seaport of Tanganyika. The harbor is almost landlocked and there are deep-water berths for ocean-going vessels.



BRITISH INFORMATION SERVICES

SOMALI TRIBAL POLICEMEN pose beside a signpost near Isiolo, a small village in the Northern Frontier District of Kenya. It is a vast region that gets little rainfall.

there today are largely the descendants of European settlers (mostly French) and Africans. They speak French or a Creole dialect. Fertile and with plenty of rain, the Seychelles produce coconuts and cinnamon in abundance. Copra (dried coconut meat) and cinnamon-leaf oil are exported in considerable quantity.

Central African Federation

Since 1953, Southern and Northern Rhodesia and Nyasaland have been loosely joined in the Central African Federation. It is a landlocked area, high on the African plateau. Thus it is cool enough to attract white settlers.

Most of this vast tableland is a rather dry savanna, or veld, which, in its natural state, is covered with grass and occasional woods. There are few navigable waterways. Rail and road networks need to be extended to handle the increased traffic that has come with developments since World War II. With no coast of its own, the federation relies upon ports in Portuguese Mozambique for handling its overseas trade.

Nyasaland, the smallest partner in the federation, has more than a third of the population. The territory includes all of Lake Nyasa, which lies in the southernmost arm of the Great Rift Valley. The lake is 1,500 feet above sea level and the mountains that flank it vary from 3,300 to 10,000 feet. The lowlands are very hot, but the uplands are more comfortable and healthier. Just north of the capital, Zomba, the Zomba Plateau rises to 7,000 feet and is a cool summer resort.

Nyasaland is mostly a farming country. The Africans, chiefly Bantu, grow corn, sorghum and cassava for themselves. Tobacco, tea, tung and cotton are produced for trade, though the total value of exports is far below that of the Rhodesias. However, Nyasaland supplies more than half the pipe tobacco consumed in the United Kingdom.

In Northern Rhodesia the tableland is broken by hills, sometimes chains of them. West of the Luangwa Valley the Muchinga Mountains form part of a great escarpment (long, high cliffs), where

peaks occasionally tower as high as eight thousand feet. Though most of the rolling upland is an open, grassy plain, there are large, swampy areas.

Northern Rhodesia has a wealth of minerals. The Copperbelt runs along the border with the Belgian Congo. It is a strip only sixty-five miles long and half again as wide. Yet it is one of the leading copper producers in the world. Africans were digging the ruddy metal there as early as the 1300's. In the 1920's, however, the belt was chiefly the home of lions, elephants and leopards. Today its towns boast golf courses, swimming pools, modern stores, motion-picture theaters and other luxuries of civilization.

Copperbelt Riches

The relatively rich ores of the Copperbelt also contain cobalt and uranium. However, copper accounts for more than 90 per cent of the value of Northern Rhodesia's exports. South of the Copperbelt is Broken Hill, an important lead, zinc and vanadium producer.

Large numbers of Africans work for the mining companies, and others migrate to nearby territories for work. This means fewer farmers, and agriculture as a whole suffers. Many of those who live in the wooded savanna practice what is called *chitemene*. As the soil is exhausted, they shift from plot to plot. When a new garden is prepared, they fell trees or lop off branches. The wood is collected and burnt to provide a rich ash seed bed. Although it is a wasteful method of enriching the soil, no satisfactory alternative has been found. Accidents are not uncommon, for the men vie with each other in daring as they hack at the trees.

On the Barotseland plains and in other grassy areas, the Africans follow a kind of soil-selection system. It shows considerable understanding of the relation between soil and the vegetation that grows on it. A farmer may have as many as six distinct gardens, each planted with the crop best suited to the spot.

Lusaka, the capital, is almost exactly in the center of Northern Rhodesia. Two



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SWAHILI WOMEN of Zanzibar take great pains with their appearance. They paint designs on their cheeks and foreheads and dress their hair elaborately. Their long toothed comb is like that used by the Fiji Islanders. Because these girls are a mixture of two races, Arab and Negro, one sister may be dark with woolly hair, another lighter with straight hair.



LINCOLN

IN ZANZIBAR and on the neighboring mainland live the Swahilis or "coast people." They are the descendants of Arabs who generations ago came here as traders and married Negro inhabitants. They speak archaic Bantu mixed with Arabic and use Persian, Hindu, Portuguese, German and English words besides. Their color varies and their features are often Semitic.



BLACK STAR

THE OWEN FALLS DAM, in Uganda, as it was being constructed. It holds back the waters of the White Nile River not far below the outlet of the stream from Lake Victoria.



EWING GALLOWAY

SURVEYING THE WORLD from atop bales of sisal in a Tanganyika warehouse. The tough fiber, from which extremely strong twine is made, is one of the territory's chief exports.



EWING GALLOWAY

A MOMBASA WITCH DOCTOR is made up to look terrifying. From his dead-white face, his black-encircled eyes gaze ominously. A flaring feather headdress completes the outfit.



© E. N. A.

HIPPOPOTAMI comes from the Greek meaning "river horses." They may have been the behemoths of Scripture, although they are no longer found in the Jordan Valley. There is a pygmy variety about six feet in length, but these denizens of the Zambezi River are nearly as large

as elephants. They spend most of their time under water with only their eyes and nostrils above the surface, or if they dive while foraging for plants, they come to the top every few minutes. Their teeth provide ivory, their hide makes whips and their flesh is eaten by the natives.

highways meet here, from Tanganyika and from Nyasaland. Livingstone, named for the famous missionary and explorer David Livingstone, is the take-off point to see nearby Victoria Falls.

The tremendous cascade is a drop in the Zambezi River, the boundary between Northern and Southern Rhodesia. In this part of its course, far inland, the river carves its way through deep gorges. An odd fact about the falls is that the level of the country is the same both above and below. With a mighty roar, the water plunges into an enormous crack, which is more than a mile at right angles to the course of the river. From the lip of the cataract to the lip of the cliffs opposite is a distance of less than 400 feet. Higher and wider than Niagara, Victoria Falls extend the whole length of the mile-wide chasm and drop, on the average, about 350 feet. The spray rises so high and the water causes the earth to tremble so that Africans call the falls the "smoke that thunders." The Zambezi breaks out of the slit through a narrow opening, the Boiling Pot, in the long wall of cliffs opposite. From there it foams into a winding canyon.

Southern Rhodesia

In Southern Rhodesia the uplands are highest from northeast to southwest and slope off on either side. The high veld is about four thousand feet above sea level, and takes up about one-fourth of the total area. It has the most congenial climate, the highest rainfall, the densest population and the most advanced economic development in the federation.

The possible range of crops in Southern Rhodesia is very great, but tobacco is by all odds the most important commercial crop. Tobacco products make up more than a third of the total exports; and Salisbury, the capital of both Southern Rhodesia and the federation, has become the greatest single tobacco market in the world. Europeans own the tobacco farms, Southern Rhodesia having by far the largest number of white settlers of any British African territory. However, most of the farms are extensive ranches,

and the total plowed area is less than a million acres. Many Africans work on the European farms. On their own land, Africans often outshine white farmers. They practice crop rotation and get larger yields from poorer soil.

What is called the low veld consists of a narrow strip in the Zambezi Valley and a broader tract in the southeast. These sections are unpleasantly hot and are usually avoided. Some day, perhaps, these valleys will be irrigated.

In Matabeleland

The most interesting African group is the Matabele, a Bantu-speaking people of Zulu origin. Once fierce warriors, they were driven from the south and settled north of the Limpopo River, on the southern border of Southern Rhodesia. This region is called Matabeleland. Today the people are peaceful farmers and herdsmen. Bulawayo, Southern Rhodesia's lively commercial and industrial center, is in Matabeleland.

Mining in Southern Rhodesia is less important than in Northern Rhodesia, but there is a greater variety of minerals. Chrome and asbestos are shipped abroad. High-grade iron ore is mined and made into steel in a small plant near Que Que, in Matabeleland. It is thought that there are enormous reserves of coal in a number of areas. So far, the only large source of coal in the whole federation is at Wankie, seventy miles southeast of Victoria Falls.

This coal is produced at exceptionally low cost. As fuel for power, it is important to railroads and industries. It also supplies copper smelters in both Northern Rhodesia and the Belgian Congo. From Wankie to the Copperbelt, however, is a long haul, expensive and wasteful of transport.

For further industrial expansion, Southern Rhodesia needs more power, and the Copperbelt needs a source of power closer at hand. In 1954, to meet these demands, the federation government began a project that will harness the Zambezi and Kafue rivers. The Zambezi is to be dammed in the immense Kariba



BLACK STAR

HOUSE IN THE ROUND—a partly finished native hut, Northern Rhodesia. Tree-trunk supports are in place, and branches tied together for a roof. It will be plastered with mud and thatched.

EMERGING AFRICAN STATES

Gorge, more than a hundred miles below Victoria Falls. About another twenty-five miles downstream, a dam will be constructed where the Kafue joins the Zambezi. The Kafue winds down from the copper belt. When completed, these will be two of the world's largest hydro-electric installations.

Railroad construction was also going

forward rapidly in the 1950's. A double track will connect the Rhodesias (and also the rich mineral belt of the Belgian Congo Katanga) with the port of Lourenço Marques, in Mozambique. This port has a great sheltered bay capable of unlimited development and is the best harbor in Africa south of the equator.

By WILLIAM A. HANCE

EMERGING AFRICAN STATES: FACTS AND FIGURES

GAMBIA

Crown colony and protectorate administered by a governor and executive and legislative councils. Universal franchise. Area, 4,003 sq. mi.; population, 267,000. Chief exports: peanuts, palm kernels, hides. Capital, Bathurst, 21,500.

SIERRA LEONE

Colony and protectorate under a governor, all-African Executive Council and House of Representatives; to become independent in 1961. Total area, 27,968 sq. mi.; population, 2,230,000. Leading exports: diamonds, palm oil and kernels, iron ore, kola nuts, ginger and piassava. Imports: textiles, tobacco, coal, bags and sacks. Railway mileage, 394; roads, 2,992 mi.; airport. Government, mission schools. Capital, Freetown, 100,000.

GHANA

Independent in 1957, became a republic in 1960. British Togoland, former UN trust territory, is included. Area, 91,843 sq. mi.; population, 5,000,000. Exports: cocoa, gold, manganese, diamonds, timber. Railways, 767 mi.; roads, 15,000 mi.; airline. Capital, Accra.

NIGERIA

Became independent in 1960. Total area, 372,674 sq. mi.; population, 35,000,000. Leading exports: coal, tin, peanuts, palm oil and palm kernels, bananas, cocoa. Imports: cotton textiles, iron and steel products, salt and fish. Chief towns: Lagos, capital, 337,000; Ibadan, 459,200; Kano, 130,200. Has about 40,000 motor vehicles, 25,000 telephones; television; air service.

SOMALILAND, FORMER PROTECTORATE

Became free in 1960 and united with new nation of Somalia. Area, 68,000 sq. mi.; popula-

tion, 640,000. Leading industry is stock raising. Capital, Hargeisa, 40,000; Berbera, 20,000.

UGANDA PROTECTORATE

Administered by a governor with assistance of executive and legislative councils. Area, 93,981 sq. mi.; population, 5,767,000. Leading exports: cotton, coffee, cottonseed and tobacco. Capital, Entebbe, 11,000.

KENYA COLONY AND PROTECTORATE

Administered by a governor, moving toward self-government. Total area, 224,960 sq. mi.; population, 6,351,000. Leading exports are sisal, coffee, hides, skins, wattle extract, and pyrethrum. Capital, Nairobi, 234,000.

FED. OF RHODESIA AND NYASALAND

Formed 1953 by constitution uniting Nyasaland, Northern Rhodesia and Southern Rhodesia. It is administered by a governor general and an elected Central Federal Assembly. Each member of the union has its own local government. Area, about 487,640 sq. mi.; population, about 8,000,000. Nyasaland exports include tobacco, tea, cotton, pulse and tung oil. Capital, Zomba, 8,000. Northern Rhodesia produces much copper, zinc and lead, its copper ores being the richest in the world. Capital, Lusaka, 11,000. Southern Rhodesia farming and dairying are profitable; gold and other mineral resources are abundant. Salisbury (capital of the federation), 200,000; Bulawayo, 135,000. Roads (in federation), about 63,000 mi.; railways, 2,300 mi. Airport at Livingstone.

ISLAND PROTECTORATES

Zanzibar and Pemba. Two major islands off the coast of Tanganyika. Total area, 1,020 sq. mi.; population, 300,000.

Seychelles and dependencies. Comprising 92 islands, 1,000 miles from Kenya. Total area, 156 sq. mi.; population, 42,000.

UNITED NATIONS TRUSTESHIPS: FACTS AND FIGURES

CAMEROONS, BRITISH

Area, 34,081 sq. mi.; population, 1,591,000. Chief town, Buea.

TANGANYIKA

Internally self-governing since 1960. Area, 362,688 sq. mi.; population, 9,000,000. Leading

products: sisal, coffee, cotton, hides and skins, diamonds, gold. Capital, Dar es Salaam, 130,000. The territory is under British administration but gained self-government in everything but defense and foreign relations in 1960 in preparation for complete independence. It might unite with Kenya and Uganda.



Congo Basin ... *the heart of Africa*

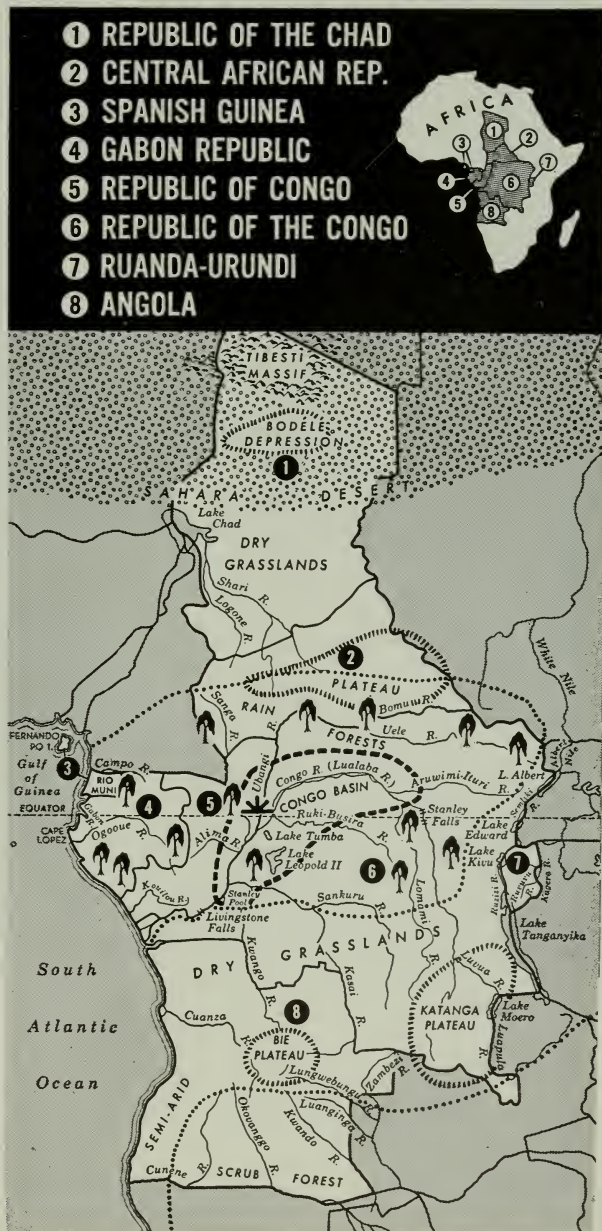
UNTIL the late 1950's the lands drained by the mighty Congo River and its branches were a relatively calm eye in the storm of political unrest sweeping Africa. The storm moved closer when Ghana won independence in 1957 and arrived in the Congo in 1958. That year French Equatorial Africa broke up into the self-governing Chad, Central African, Congo and Gabon republics, within the French Community. The four republics, all in the north of the basin, are joined in a customs union and administer their communications in common.

It bears on the present situation in the Congo that in 1944 General Charles de Gaulle made Brazzaville (capital of today's Congo Republic) a center of the Free French Movement. It was there also that he dedicated himself to increasing the rights of the French Overseas Territories. In creating the French Community in 1958, he was in part carrying out the promise he had made fourteen years before. (We tell you more about the Community elsewhere.)

Brazzaville is directly across the Congo River from Leopoldville, capital of what was the Belgian Congo until it became another independent Congo Republic, in 1960. The contagion of freedom leaped the broad stream with ease.

Until 1957 the Belgian Congo was governed directly from the Belgian capital, Brussels. One effect of this was that neither Europeans nor Africans had any political rights in the colony. The Africans were treated kindly enough but rather as if they were children. Schools and hospitals were established for them. African miners were permitted to live with their families instead of having to leave them behind in their native villages, as in South Africa. Tribal customs were respected. The best houses for Africans

in the whole continent were constructed in the growing cities. The only segregation practiced was economic. Yet the average yearly income of a city-dwelling



African was only \$41, and outside the cities, \$29.

Thus poverty and a sense of indignity prepared the Belgian Congolese for following the example of their brothers across the river. The Belgian Government also was alert to the changing temper of the Africans. Besides granting voting rights in 1957 it allowed the Africans to form social and cultural societies. But much faster than the authorities expected the societies turned into political parties—sixty of them, divided along tribal lines. (Twenty-five of these merged late in 1959.) One of the Belgian Congo's biggest hurdles on the path to healthy organization into a nation is the hostility that exists between many of the tribes.

It was partly as a result of tribal resentments—though unemployment and overcrowding played a part—that violence broke out in Leopoldville in January 1959. The city was practically besieged for a week. Following this the Belgian Government began to yield to the demands for independence. Elections were held in May 1960; the new state was born on June 30, 1960. Almost at once, violence broke out led by mutinous Congolese troops. The leaders of the new state called on the UN for help in restoring order.

At the same time the southern province of Katanga was at odds with the central Government. Belgium's own economy is to a large extent dependent on Katanga's enormous mineral riches—copper, uranium, industrial diamonds. One of the world's greatest mining combines, the Union Minière du Haut Katanga, is almost half owned by Belgium. The combine also pays from a third to a half of all the Belgian Congo's taxes. In 1960 the Union was planning to spend \$20,800,000 a year for the next twelve years on plant expansion.

The first institution of higher learning for Africans in the former Belgian Congo—Lovanium University, at Leopoldville—opened its doors in 1954 although it was not given official recognition until two years later. The first two Negro

doctors in the Belgian Congo were due to be graduated from it in 1961.

Ruanda-Urundi, a UN trust territory under Belgian administration, was being prepared by UN experts for independence in 1961. Tribal difficulties also afflict this beautiful area on the northeast shore of Lake Tanganyika. There the Bahutu are bitterly resentful of their subservient position to the giant, handsome Watusi, whose men average six feet six inches in height.

Little Spanish Guinea, on the west coast, has remained thus far a quiet backwater. It is a poor, damp wasteland, with one exception. That is the possibility of oil. Prospecting by foreign companies began in 1959.

On the surface the Portuguese colony of Angola also seems quiet. It is underdeveloped to an extreme, ridden with poverty, illiteracy, disease, chronic undernourishment. A type of forced labor is common. On the other hand it is the home of the Bakongo (who have relatives in both Congo Republics). They are said to be arrogant and thoroughly detested by other tribes in the area. The Bakongo played a major role in the Leopoldville riots. So it hardly seems likely that they will remain quiet in Angola much longer, if they are that now. Censorship is strict. However, there have been reports of uprisings.

European Exploration

The Portuguese, in the 1400's, were the first Europeans to reach the Congo River but they were barred by rapids. For four hundred years little was known of the river. In 1876, however, Henry M. Stanley, who had gained fame by his expedition in search of David Livingstone, the Scottish missionary-explorer, was again in central Africa and came upon a river, called by the natives Lualaba (Great River), which he thought might be the Upper Nile and determined to explore it.

He came in from Zanzibar on the east coast in time to start in October from Nyangwe, a point on the Lualaba just west of the upper part of Lake Tangan-



BELGIAN TOURIST BUREAU

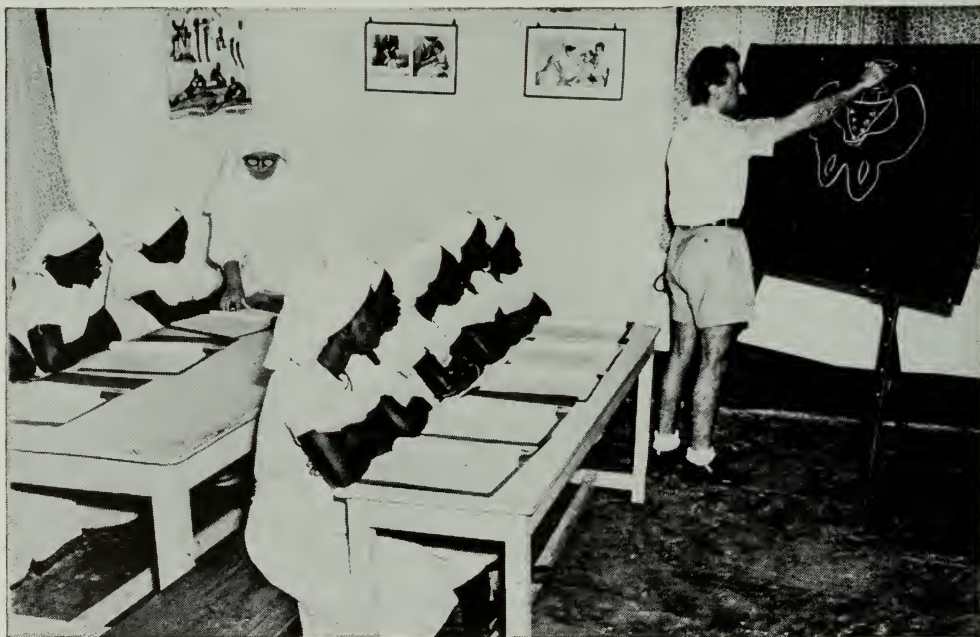
HIGHEST SINGLE-LEAP FALLS IN AFRICA

The little-known Lofoi River, in the province of Katanga in Belgian Congo, sends its waters rushing down the steep side of the Kundelungu Mountain for a sheer drop of 1,260 feet into the valley below. It is said to be the highest single-leap falls on the African continent, exceeded only by the 2,810-foot drop of the Tugela River falls in Natal that makes several leaps.



EDUCATION AND PROGRESS GO HAND IN HAND IN AFRICA

The Marie-José Institute at Elizabethville, Belgian Congo, is an up-to-date junior high school for girls, operated by the Sisters of Charity of Ghent. Although the number of modern schools is steadily increasing in the Belgian Congo, only about one-twentieth of the colony's total population thus far has an opportunity to receive a scholastic education.



PHOTOS, BELGIAN GOVERNMENT INFORMATION CENTER

NATIVE NURSES LEARN ABOUT MODERN HEALTH PROTECTION

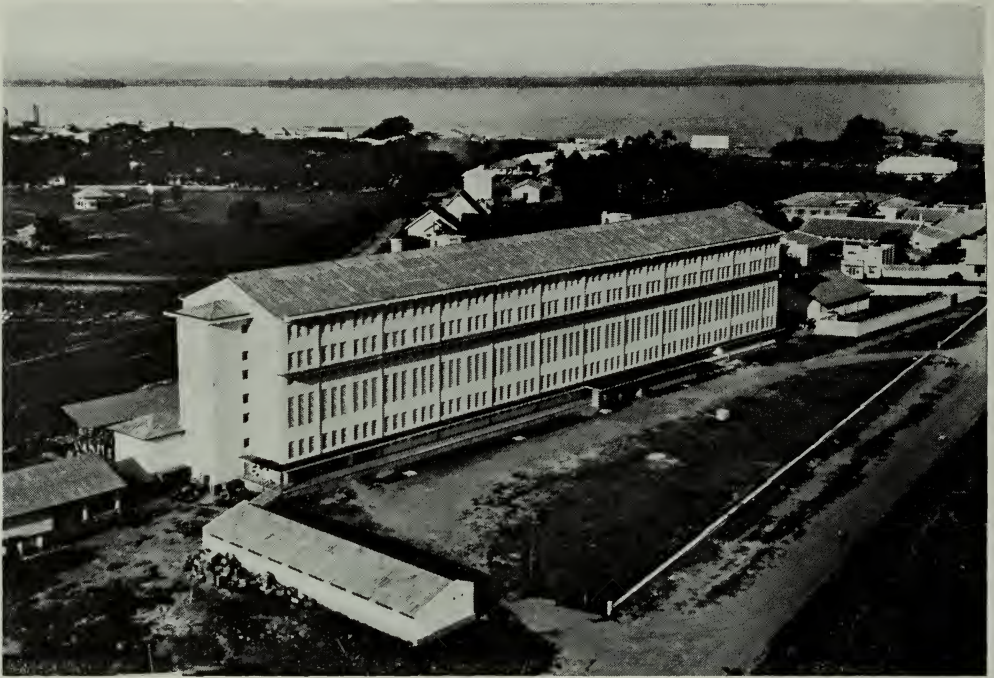
At this Red Cross school for nurses at Pawa in the Belgian Congo, white nurses and doctors instruct the native women in such things as first aid to the injured, hygiene and sanitation. These native women are eager to learn, and when they return to their villages, they will have the knowledge by which they can improve and protect the health of their people.



SABENA

EVERY INCH A KING

The king of a Ruandi tribe and a pygmy chieftain take each other's measure. Ruanda-Urundi is a United Nations trust territory in east-central Africa. It is united economically with Belgian Congo and administered by Belgium. Local law is in the hands of native chieftains invested with Belgian authority. The territory is densely populated and often faced with famine.



AT LEOPOLDVILLE, capital city of the Belgian Congo, a modern, sanitary building houses the colonial government's depot for medical supplies.



PHOTOS, BELGIAN CONGO TOURIST OFFICE

THERE IS LITTLE about Leopoldville to remind one that the city lies in the heart of primitive Africa. This is a view of part of its well-planned commercial district.



BELGIAN GOVERNMENT INFORMATION CENTER

A SINEWY DANCER OF THE WATUSI, DECKED IN TRIBAL REGALIA

The Watusi are among the tallest people on earth; it is not uncommon for a man to attain the stature of seven feet. They herd long-horned cattle among the highlands of Ruanda Urundi.

yika. It was a region of equatorial heat and heavy winter rains, where the waterways led through tangled jungle forest made terrifying at night by the howls of beasts and almost equally dangerous by day by reason of the myriad fever-breeding insects and the savage warriors who met them with flights of arrows. The heat was prostrating and food ran low, and the three white men who started with him died of the almost incredible hardships that met them all along the way. Stanley himself was prematurely aged by these experiences, but he was young and somehow managed to pull through.

After a few portages near the start where they had to pass some falls and rapids, the journey could be made entirely by canoe. At times the river widened into muddy swamp lands or lakes bordered by papyrus and other reeds and grasses; but for the most part it flowed through a tunnel of trees. For weeks of travel the Luabala led them northward, then took a surprising sweep to the westward and south-westward as it became the Congo. The following spring they came to what is now Stanley Pool or Leopoldville, and here the river nar-

rowed from three miles to perhaps three-quarters of a mile, to go leaping and thundering for 170 miles over rock-walled cataracts. Below that long detour, during which they had to hack their way through all but impenetrable underbrush, the stream was again navigable; and soon they reached Boma, a port some seventy miles inland. The Congo empties into an Atlantic stained red-brown with river silt, as the stream



Mrs. J. H. Harris

THE MOST FAMOUS BEARD IN CONGOLAND

This man is chief of a troublesome folk, but they are proud of him, for plaited and coiled under his chin is his beard, rather thin, but many feet long. Only on state occasions does he uncoil it to the admiring public gaze.

widens over seven miles of delta fringed with mangrove swamp. Stanley had crossed the African continent from east to west and had traced nearly two thousand miles of navigable waterway. His dramatic published accounts of his adventures were translated into several languages.

A year after his discovery of what has proven to be one of the world's largest rivers, which drains a basin correspond-

IN THE HEART OF AFRICA

ingly vast, King Leopold II of Belgium formed an association for the opening of the Congo basin to commerce. To secure peace and further trade relations with the natives, he made hundreds of treaties with small independent African sovereigns. As a consequence, in 1885 the Congo

Free State was founded with King Leopold as ruler. The state was ceded to Belgium, however, in 1908, and in 1927 its territory was increased by an exchange with Portugal which gave the latter country area for a port in the estuary of the Congo near Matadi.



EWING GALLOWAY

A GROTESQUE GROVE OF GRAIN CACHES IN PORTUGUESE ANGOLA

Looking every bit like giant mushrooms or, to the more fanciful, like an orchard of lollipops, are the grain caches of Angola. In order to keep the grain out of the reach of animals and vermin, the people weave coarse grasses and leaves into large nets. When they have filled the nets with grain they hoist them to the branches of trees or balance them on long stakes.

The main products of the Belgian Congo proved to be the ivory of elephant tusks and the products of the palm and rubber trees, together with resin, copal and certain vegetable fibers. The Belgians have made successful experiments in the growing of cotton.

Sands That Yield Diamonds

The sands of the Kasai River, a major tributary of the Congo, yield most of the world's diamond supply. Yet the value of South Africa's diamond production is far greater. A larger percentage of South African diamonds are of the quality best suited for jewelry. Most Congo diamonds are discolored or of an imperfect shape; less than 10 per cent can be ground and polished into precious stones.

Whether or not it is of gem quality, diamond is the hardest substance known to man. Oil-well drills tipped with industrial diamonds bore through shelves of rock that resist all other cutting tools. Granite is cut with saws that have diamonds set in their teeth. Diamonds expand only the tiniest fraction when they are heated and are therefore especially long-wearing and accurate when used as bearings in delicate instruments.

Another valuable mineral of the Belgian Congo is pitchblende, a heavy ore that takes its name from its lustrous, pitch-black sheen. The pitchblende of the Congo is concentrated in the southern district of Katanga near Shinkolobwe, a village seventy miles northwest of Elizabethville. For years (until the discovery of rich Canadian deposits) the Belgian Congo was the world's principal source of radium, a radioactive element highly valued in medicine for the treatment of tumors. Other elements in pitchblende include lead, the rare earths and, most important, thorium and uranium.

Uranium is the fuel of the atomic age, and the production of atomic energy has become one of the primary concerns of all the great nations of the world. There is a possibility that thorium, as well as uranium, can serve as a "breeder" of the isotopes that release atomic energy. Since the fields of Katanga yield both metals,

the Belgian Congo should, as she has done until now, continue to furnish a large portion of the raw materials that are needed for atomic research.

What of the people of the Congo? Let us journey up the river for perhaps a thousand miles. Here and there the native villages peep from amid the close green foliage. Our little steamer blows her whistle, and in a moment we see dusky figures gathering on the beach. Several dug-out canoes put out to meet us. The former warriors have become peaceable fisherfolk.

Our steamer slows down and drops its anchor. As we go ashore, the people crowd around us, moved by curiosity. The day has long passed when they feared the white man, but a chance visit never fails to create excitement. They wear little clothing, and their chocolate-brown bodies are tattooed. They have their teeth filed to points, like the teeth of a saw, and tribal marks are cut on their faces. These marks are cut deeply into the flesh of the cheeks and forehead with a sharp iron instrument. It is a painful process and not infrequently causes blood poisoning.

Large and small dugouts are drawn up on the beach, and fishing nets, attached to wooden frames, lie drying in the sun. Fish traps, too, made of split bamboo or of the cane called rattan, are in evidence. From one dugout the day's catch of fish is just being landed and carried up to the village market. Now the smell of the salt tide mingles with a welcome taint of wood smoke, for beyond the beach is the village with its two long rows of huts facing one another. The village's lower end opens on the shore, but the upper end is closed to enable the villagers to defend themselves in case of attack by neighboring tribes. Behind the village is the primeval forest, extending for hundreds of miles.

Homes of Bamboo and Thatch

The oblong huts are made of bamboo and thatch. It is interesting to watch the people building a hut. First a framework is erected—that is, long bamboo poles are driven into the ground and lashed to-



CHICAGO NATURAL HISTORY MUSEUM

WHEN COMPLETED, the coiled basket will be as firm and strong as any pottery vessel. Basket-weaving is a highly developed craft among native tribes of Portuguese Angola.

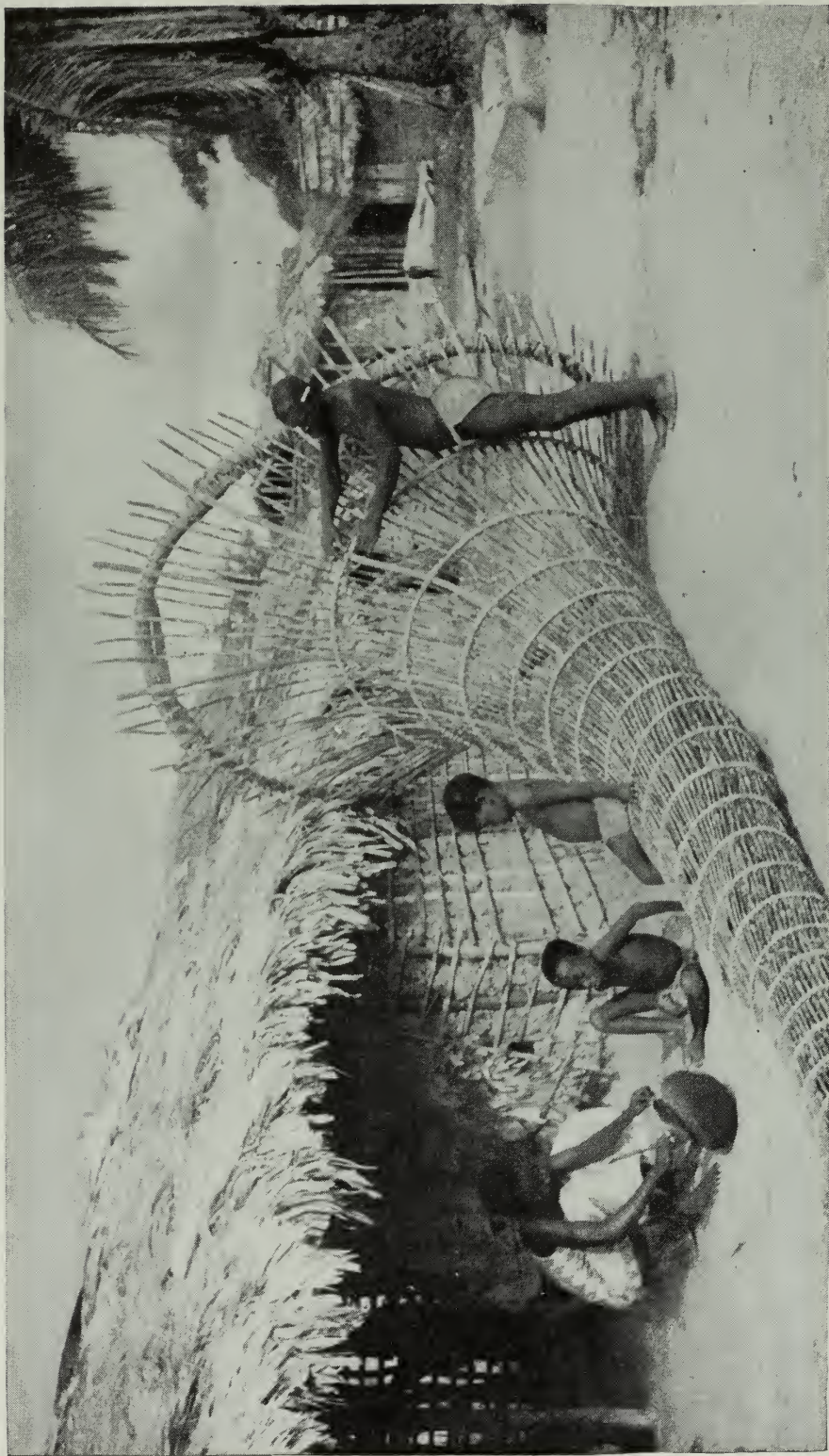
gether with cross-pieces and fiber. Then the big thatched roof of dry palm leaves is added, and last, the framework walls are covered with coconut matting.

Near the houses a space has been cleared in the forest to make gardens in which people grow yams, cassava and other vegetables; and there is likely to be a fragrant plantation of banana trees, their bright green leaves contrasting with those of the mango trees and the palms. The women cultivate the gardens and take the produce to the village, using big funnel-shaped baskets of split bamboo which they carry on their backs. Their task is not a little dangerous, for as a woman stoops to her work it is no uncommon thing for a leopard from the forest to spring murderously upon her.

One strange custom is that the boys, while still quite young, leave home and join in building a hut and keeping house for themselves. They provide food by

catching fish, trapping birds, squirrels and monkeys. They even stretch strings from the trees to catch bats. One of their chief delights is ratting, and many a nice plump field mouse finds its way into their cooking pot. Large hairy caterpillars, ants and beetles are also enjoyed.

There are two people in the village we must certainly visit—the chief and the witch doctor. We exchange greetings, then the chief leads us to his dwelling or the public “palaver house,” where he holds a reception in our honor. Two or three European camp chairs may be brought out of the dark recesses of some hut and placed for us, while the chief takes his seat on a stool or in a hammock. We again exchange pleasantries, tell the chief why we have come to his village and make him a present—possibly a hatchet, a piece of cloth or even an alarm clock. In return, he gives us bananas, eggs, yams, coconuts, a couple of chickens or perhaps a goat.



BLACK STAR

IN A CONGO FISHING VILLAGE: A LONG, HORN-SHAPED BASKET MEANT FOR TRAPPING FISH IN THE RAPIDS

Before his hut—its walls of reinforced clay, its roof of thatch—the man of the family fastens a cane rod to his fishing basket, which serves

as a weir when placed in a stream. The children watch their mother prepare the midday meal in a deep pottery mixing bowl.

The witch doctor is the priest of the village, and the people fear him because they believe he has power to command evil spirits; but he sells them charms to protect them from wild beasts, sickness, evil men and even those selfsame evil spirits. The people also think that he can bring dreadful diseases upon the village or cause a man to die. He is usually a cunning rogue, able to mix powerful poisons, and is certainly a man to be greatly feared where his enmity is incurred.

The Congo basin is inhabited by many tribes speaking different languages. Some villages are not at all like the one we have described.

Today a belt of valuable mines two hundred miles long extends through the highlands. Lubambashi in Katanga gives Belgium a good supply of copper for world export, and the natives who are partly civilized are kept busy at the mines and smelting works. In the south and east highlands there are also gold, uranium, diamonds, platinum and coal. Though the navigable waterways are still the important highways, short lengths of railroad connect them and there are more than 45,000 miles of roads. There is also regular air service between various districts.

For centuries there were rumors that a race of small black people existed in the heart of Africa, and many travelers and historians of past centuries had mentioned these dwarfs. In 1863-65 P. B. Du Chaillu came upon them. In 1887 Stanley, while passing through a vast forest between the Congo and Lake Albert, found numbers of these little people. Some of them were only three feet in height. They were so small that the explorer often thought his scouts had



EWING GALLOWAY

OUTDOOR BLACKSMITH SHOP in Angola. One man hammers out a knife; the other works a crude bellows.

caught children, until he perceived that they were full-grown men and women. The women averaged but four feet in height and none of the men was over four feet six inches.

These tiny black folk live by hunting, and they are extraordinarily skillful at tracking game through the dark, swampy forests and killing it with their bows and arrows. They live in villages of small grass huts shaped like beehives. Stanley found one village of ninety-two huts. But the pigmies were very shy and always de-

sented their villages as Stanley's men approached, though from time to time a few were captured and examined. These villages they abandon when they feel the need to move on, for a time, to where game is more plentiful. The forest dwarfs are better termed Negrillos.

The vast basin of the Congo does not all belong to Belgium. Thirty-five years before Stanley unveiled the secrets of the river, the French had settlements on the Gabun River, some five hundred miles north of the mouth of the Congo. Then in 1880, De Brazza—for whom Brazzaville, the river port, is named—placed under French protection a portion of the north bank of the Congo, from below Stanley Pool for four hundred miles to the Ubangi. From here the whole northern bank of the Ubangi to the borders of the Sudan is part of the French Community. Almost all the northern tributaries of the Congo flow through French territory.

Portuguese Angola

While many northern tributaries of the Congo water the new republics, some of the southern tributaries rise in Portuguese soil. In the fifteenth century, when the mariners and soldier-adventurers of Portugal found the way up the main river blocked by rapids, they turned their attention to the country immediately to the south—the dominions of that King of Kongo mentioned earlier in this article. Long years of exploration, conquest and colonization resulted in the establishment of Portuguese control over a vast tract known as Angola, the capital of which was the ancient port city of São Paulo de Loanda, founded in 1575. (The present capital is Nova Lisboa.)

The highlands of Angola are adapted to the growing of sugar and coffee and the raising of oxen, though the territory has remained largely undeveloped.

In both the French and the Portuguese Congo the natives, with the exception of the pure Negrillos (pigmies), belong to the great Bantu family, as do most of the Negroid people living in equatorial and southern Africa.

Literally the word "Bantu" means sim-

ply "the people" and is applied to a large number of tribes speaking different dialects. The Bantu tongues make up one of the world's chief language groups. It is believed that originally the Bantus lived in eastern Africa and at some later period pushed their way south and west.



FRENCH EMBASSY PRESS & INFO. DIV.

A LADY MILK-SELLER OF CHAD

Each day this Kotoko woman must walk many miles in order to sell her milk in the market of Fort-Lamy. Notice her long, tight braids, which are liberally oiled with butter.



AMERICAN MUSEUM OF NATURAL HISTORY

RATTLE-DRUMS, TOM-TOMS AND HORNS FOR THE TRIBAL DANCE

CONGO BASIN: FACTS AND FIGURES

ANGOLA (PORTUGUESE WEST AFRICA)

Colony, administered by a governor general. Area, 481,551 sq. mi.; pop., 4,354,000. Luanda, cap., 190,000. Produces coffee, rubber, wax, oilseeds, sugar, sisal fiber, diamonds; has copper, gold, iron, manganese, salt. Rwy., 1,822 mi.; roads, 22,000 mi.; 27,000 motor vehicles; air service; 4,000 telephones.

CENTRAL AFRICAN REPUBLIC (see also page 32)

Was known as Ubangi-Shari until 1958; west of Congo River. Area, 238,200 sq. mi.; pop., 1,127,000. Bangui, cap., 50,000. Member of French Community. Produces subsistence crops, cotton, coffee; has gold and diamonds, exports industrial diamonds. Road network; air service.

CHAD, REPUBLIC OF THE

In French Community; south of Libya. Area, 495,800 sq. mi.; pop., 2,550,000. Fort-Lamy, cap., 25,000. Produces livestock, cotton, ivory, hides, ostrich feathers. Caravan routes; air services. Mission schools and health services.

CONGO, FORMER BELGIAN

Occupies greater part of Congo Basin. Once called the Congo Free State, it became a Belgian colony in 1885. On June 30, 1960, it joined the ranks of the newly independent African states. Area, 905,563 sq. mi.; pop., 13,000,000. Léopoldville, cap., 307,000. Produces palm oil, copal, cotton, coffee, corn; copper, industrial diamonds, uranium. Inland water-

ways, 7,500 mi.; rwy., 3,198 mi.; roads, 86,350 mi.; international air service; 30,000 passenger cars; 20,000 telephones; 27,000 radios. Over 40% of children attend at least primary school. Two universities, both interracial, at Elisabethville and Kimwenza.

CONGO, REPUBLIC OF THE

Formerly Middle Congo; French Community member; west of Congo River. Area, 132,000 sq. mi.; pop., 753,000. Brazzaville, cap., 99,000. Produces palm oil and kernels, hardwoods, kola nuts, copal, rubber, tobacco, lead. Rwy., 360 mi., between Brazzaville and port of Pointe-Noire; air service; Radio Brazzaville one of most powerful stations in Africa; 10,000 motor vehicles; 5,000 telephones. Mission schools and health services.

GABON REPUBLIC

French Community member; on Atlantic coast between Spanish Guinea and Rep. of the Congo. Area, 103,100 sq. mi.; pop., 394,000. Libreville, cap., 10,000. Produces hardwoods, palm oil and kernels, cacao, rubber.

GUINEA, SPANISH

On Atlantic coast between Cameroons and Gabon Republic. A colony, including Rio Muni and offshore islands of Fernando and Annobon. Area, 10,831 sq. mi.; pop., 212,000. Santa Isabel (on Fernando Po), cap., 10,000. Chief product, cacao; fishing and cattle raising on Fernando Po. About 120 primary schools.

TRUSTEESHIP IN CENTRAL AFRICA: FACTS AND FIGURES

RUANDA-URUNDI

Former German East Africa, administered by Belgium as a United Nations trusteeship. It is expected to become independent in 1961.

Total area, about 20,916 square miles; population, 4,560,000. Capital, Usumbura. Both districts are rich in cattle. Exports are livestock, hides and foodstuffs.

Southern Africa

THE Union of South Africa dominates its part of the continent economically and politically. Its controversial racial policies, which rigidly restrict the rights of colored peoples, have kept the Union in the spotlight of world attention to such an extent that its neighbors—Mauritius, Mozambique, the High Commission Territories and South-West Africa—are put in the shade. In a sense, this is unfortunate. The Union is not the only state developed by Europeans in southern Africa, nor is its attitude toward the native peoples representative of the whole region.

Mauritius, an island in the Indian ocean to the east of Madagascar, was held by the French from 1715 until the British captured it in 1810. The new conquerors allowed the inhabitants to retain their own laws, customs and religion, however. The French still make up an important part of the population, and the French language is more common than English. Due to a number of circumstances, Mauritius is well nigh a model of colonial democracy. Economic health no doubt helps. Mauritius has a profitable sugar, cotton, indigo and spice trade. Moreover, the island is free of racial problems.



... from Cape Town to the Zambezi

Today the mixed Indo-Mauritians greatly outnumber those of pure European or African stock. The slaves were emancipated in 1834, the school system is unsegregated and the 1956 constitution assures the minority adequate representation in the Parliament.

Mozambique, a Portuguese colony on the eastern coast, bordering the Union's northeast corner, offers yet another approach to the problem of race relations. Unlike Mauritius, Mozambique is desperately poor. The economic assistance provided this area has been minimal. Its peoples, isolated from the mainstream of

African life and soothed by the long Portuguese tradition of racial equality, have to date remained quiet. Wherever Portuguese settlers have gone in the past five centuries they have intermarried with other stocks. This is true of Mozambique as well as of Brazil and Angola. The government, meanwhile, is attempting to clear away the few remaining signs of racial discrimination. Lands reserved for whites now make up but 4 per cent of the total. In areas being reclaimed the new territory is open to settlement by both Europeans and Africans.

The existence of the British High Commission Territories—Bechuanaland, Swaziland and Basutoland—is especially galling to the Union. The latter two are situated within its borders, and there the British are pursuing their policy of gradually extending political power to the Africans. In each of the three, executive power is shared to some extent between British resident commissioners and the tribal chiefs. Basutoland boasts a partially elected African legislature.

Lying to the north of the Union, South-West Africa has been governed by it under a League of Nations mandate since shortly after World War I. It is the only such mandate that has neither been transferred to UN trusteeship or granted independence. The question of its status is raised periodically in the UN but the Union refuses to accept the idea that the UN has any authority in the matter. The few Europeans who live there (roughly 65,000) favor a policy of white supremacy, and the prospects of a change in attitude seem slim. In the Union itself some members of the majority Nationalist Party have proposed outright annexation.

The ruling Europeans in the Union of South Africa have always segregated the races. Not until this century, however, was the policy (today called apartheid—an Afrikaans term meaning "separation") carried to its logical extremes. The



stiffening of apartheid has coincided with the rise to political power of the Afrikaners, descendants of the seventeenth-century Dutch pioneers.

British Influence

The British, who are a minority in the European population, wielded control for decades after 1902. That year they won the South African War, a struggle for control of the area between the British and the Afrikaners. Thus the Union's economy and foreign policy were to a large extent guided by British views. The Union is still a member of the British Commonwealth.

In 1948, however, the Nationalist Party, backed by the Afrikaners, defeated the English-supported United Party at the polls. The Nationalists have remained in office since. Under them, apartheid has been strengthened by a series of acts. Besides banning interracial marriage, these laws have an adverse effect on education, housing, and transportation for Negroes and other colored groups. Nor can they vote.

It is easy to criticize the Afrikaners for the shortsightedness and unfairness of this policy. Yet the tragic problem is not so simple. The Afrikaners have called the Union home for almost three hundred years. Europe is no more of a homeland to them than it is to citizens of the United States. The native nonwhite population they must deal with, furthermore, is far larger than that found in Mauritius, Mozambique or the territories. The Bantu alone outnumber the Europeans three to one. Both Afrikaners and English-speaking South Africans thus fear that once the Bantu is granted equal voting rights he will take over the Government. After several outbreaks of native violence in 1960, however, the Afrikaners were placed under great pressure to compromise or face economic troubles. Adverse world opinion, both within and without the Commonwealth, threatened to express itself in boycotts that might ruin the Union's vital foreign trade. The Bantu, meanwhile, are growing ever more restless. Any work stoppage on their

part would deprive the Union of its chief source of labor.

The First European Settlement

The Union of South Africa consists of four provinces: Cape of Good Hope, Natal, Transvaal and the Orange Free State. The Cape of Good Hope was discovered by the Portuguese navigator Bartholomeu Dias in 1488. However, the first attempt to colonize the pleasant pastoral region was made by the Dutch, in 1652. The Cape became a British colony in 1806 though up to 1820 the majority of the white population was Dutch. Natal was settled by both English and Boers (*Boer* means "Dutch farmer"), beginning about 1824, and became a British colony in 1844-45. During 1835-38 many of the Boers, unwilling to accept British rule, trekked north. The *Voortrekkers* have become a legend in South African history. Their most notable leader was Andries Pretorius. Eventually two Dutch republics were created north and south of the Vaal River, the Transvaal and the Orange Free State.

Gold mining began in the Transvaal in 1882. The discovery of gold brought a great increase of prosperity to South Africa—until the outbreak of the South African War (1899-1902).

Later, strenuous efforts, in which Jan Christiaan Smuts played a large part, were made to heal the breach between the Boers and the British. The efforts were crowned with success in 1910, when the Union was formed.

Cape Town, the Union's second largest city (after Johannesburg), is at the extreme southern tip of the continent. To the city's north is a region of rugged, barren mountains interspersed with fertile, well-watered valleys. There the earliest European settlers—the Dutch, and French Huguenots—made their homes. The land is beautiful and produces fruit in abundance.

North of this again we reach the Karoo, a vast plateau broken up by *kopjes* (Dutch for "little hills"). The Karoo is sparsely covered with small bushes, a dull olive-green which are known as



UNION OF SOUTH AFRICA GOVT. INFORMATION OFFICE

JOHANNESBURG, A MINING CAMP THAT GREW INTO A METROPOLIS

If some of the early gold miners could return to Johannesburg today, they would find it difficult to believe that this modern industrial city has sprung from the cluster of crude shacks that they knew back in the 1880's. This is a view looking down Jeppe Street, a broad thoroughfare lined with smart shops and beautiful, sky-scraping office buildings.



UNION OF SOUTH AFRICA GOVT. INFORMATION OFFICE

OSTRICH-BREEDING is an important industry in South Africa. There the giant, ungainly birds are raised for their beautiful wing and tail

plumes, which are removed several times a year. Except during the breeding season, the ostriches are kept in large fenced-in enclosures.



BLACK STAR

CHILDREN OF THE MATABELES, A PEOPLE OF THE TRANSVAAL

Two Matabele youngsters get acquainted while big sister looks on, indifferent to the prattle. Clothes are hardly needed, but necklaces and armlets are worn from babyhood.



BLACK STAR

SOUTH AFRICAN NATIVE DESIGNS, bold, colorful and imaginative, have transformed a sun-baked mud wall into a primitive art gallery. The woman is of the Matabele tribe.

Karoo bush. The air is clear, and we can consequently see very far. Indeed, rocks and big stones lying on hills several miles away stand out so boldly that we can almost count them. Occasionally we pass farms nestling among the hills, surrounded by small gardens and orchards, and here and there we cross a stream.

Most of the streams, however, dry up during the hot season; then water must be obtained from springs or by artificial means. In the early summer, if there has been a good rainfall, the Karroo becomes a wonderful flower garden, and it is possible to gather as many as sixty varieties of flowers; but this period does not last long. At the end of about two months the flowers are dead and the Karroo is again a desolate waste.

The Karroo is inhabited chiefly by British and Boer farmers, whose homes are often from twenty to fifty miles apart. The native inhabitants are largely Kaffirs, Hottentots and Bushmen.

All this time we have been traveling through Cape of Good Hope Province, but when we pass over the Orange River we cross into the Orange Free State. Here commences the highest and largest South African plateau, which extends across the Orange Free State, Bechuanaland and into the Transvaal, which adjoins Southern Rhodesia.

World's Richest Gold Field

West of Bechuanaland is the Kalahari Desert, which was once the home of vast herds of game, but is now a useless waste. The Kalahari stretches into the South-west Africa Protectorate, a desolate region rich in minerals, lying between Angola and Cape of Good Hope Province. In the east of South Africa is a lofty range, the Drakensberg Mountains, and between them and the coast is the province of Natal.

Kimberley and Johannesburg are the two principal cities in South Africa from the point of view of wealth and industry. Kimberley is noted for its diamonds and Johannesburg lies in the richest gold belt in the world. In the gold mines, shafts several thousand feet

deep have been sunk in the earth, and galleries have been driven out in all directions at the bottom in the search for gold, of which there seems to be a never-ending supply.

In 1835, as has been already stated, the Boers began to leave Cape Colony with their herds and flocks to settle in a land where they could live as they wished. To reach the Transvaal, where they founded a separate republic, these emigrants had to pass through the country of the Zulus, a warlike people who had conquered a large part of South Africa and possessed a vast army of trained warriors.

Boers Fight with the Zulus

One morning in the summer of 1836 it was reported that the Zulus were advancing to attack the emigrants. The Boers therefore formed their wagons into a square and piled branches between the wheels in order to prevent the natives from squeezing through. Then, with the women and children to load the rifles and prepare the ammunition, they waited for the black army to attack. This it soon did, opening out to right and left in the shape of two horns in order to encircle the wagons. The Zulus came on in thousands, seizing the wagons and trying to wrest them apart, ripping up the canvas covers with their broad-bladed spears and yelling their fierce war cries. But the Boer men and women fought with great determination and at last beat off the enemy. The Zulus, however, took away all their sheep and cattle and they would have starved but for the arrival of fresh parties who joined them in their northward trek.

Harvest Time Among the Matabele

The Matabele, who are a branch of the Zulu race, found in Southern Rhodesia, are among the best known of the South African tribes. They are tall, fine-looking people and live in round huts, with doors only some two feet in height. Their diet consists of meat, corn meal, milk and a form of native beer which they drink in large quantities. They have several festivals during the year, the chief of



UNION OF SOUTH AFRICA GOVT. INFORMATION OFFICE

AMPHITHEATER AND UNION GOVERNMENT BUILDINGS AT PRETORIA

Built of native stone, the Union Government Buildings stand on the flank of a hill known as Meintje's Kop and overlook the administrative capital of the Union of South Africa.



BLACK STAR

THE PRIME MINISTER'S RESIDENCE THAT IS CALLED A BARN

The handsome building, so beautifully situated among the trees at the bottom of Devil's Peak, is Groote Schuur—Great Barn—the old Dutch-colonial-style home of Cecil Rhodes at Rondebosch, about five miles outside of Capetown. Today it is held in trust as the official summer residence of the premier of the Union of South Africa during sessions of Parliament.



South African Govt.

PIETERMARITZBURG IN AN AMPHITHEATRE OF HILLS

From the tower that surmounts the town hall we can here look down upon Pietermaritzburg and see the straight line of Church Street reaching away toward the surrounding hills. Pietermaritzburg, which has direct rail connections with the Transvaal, is the capital of Natal, a country of vast sugar and other plantations.



OVAMBO TRIBESMEN of South-West Africa weave the roof for one of their circular houses. Many of the natives are employed as tenant farmers to work the land of European owners.



PHOTOS, UNION OF SOUTH AFRICA GOVERNMENT INFORMATION OFFICE

FARMERS OF ZULULAND often have to transport their crops on crude, ox-drawn sleds. Only the land near the railroads and local markets can be used profitably for growing grain.



BLACK STAR

WOOL CLIPPED FROM SOUTH AFRICAN SHEEP AWAITS SHIPMENT

Sheep are the most important stock animals in the Union of South Africa, and wool is one of the country's most important exports. Most of the baled wool is shipped out of Port Elizabeth on Algoa Bay and East London at the Buffalo River. The mild climate of South Africa and the extensive grassy plateaus make the country suitable for grazing sheep and cattle.

which comes at harvest time. On the great day, when the harvest has been a good one, all collect in a vast square in the village of the tribal chief. There may be as many as two or three thousand warriors formed in a semicircle eight or nine deep, each man with his assagai, or spear, and shield. They then begin to chant a song, keeping time with their feet; occasionally they beat with their assagais on

their ox-hide shields, making a noise like thunder.

Now a man who has performed some great deed will spring out from among the warriors and execute a dance, thrusting with his assagai and otherwise showing how he would dispose of his enemies. Nearly all the warriors wear ostrich feathers stuck in their hair and have coats of the skins of different animals.



BLACK STAR

RICKSHAW BOYS WAITING FOR PASSENGERS, DURBAN

These two-wheeled, light vehicles, pulled by elaborately dressed young Zulus, prove fascinating to tourists in Durban. Located on the Bay of Natal just south of the Umgeni River, the city is one of South Africa's major seaports as well as a manufacturing and trading center. It is a popular seaside vacation resort with bathing facilities and sports grounds.



MONKMEYER

THE DEFT FINGERS OF A ZULU SCULPTOR WORK MAGIC IN CLAY

His young audience watches in rapt attention as the artist skillfully models his native villagers and spreads the completed pieces on a mat, where they will be dried by the sun.

The Bechuanas are another of the native races of South Africa and live in much the same way as the Matabele. They have the curious custom of adopting some animal as a sort of tribal mascot. Sometimes it is a crocodile, or it may be an antelope, a monkey or an elephant. Their dress is usually a cloak made from skins, and they are fond of ornaments in the shape of bracelets and anklets of beads, metal and the teeth of wild animals. For weapons they have assagais, small daggers and clubs called knobkerries, often beautifully carved.

The Bechuanas also are fond of dancing, and when several thousand of them perform together the scene is really splendid. Their marriage customs are similar to those of other South African tribes. The wife is acquired by purchase, her value varying according to her looks and her reputation as a housekeeper.

Rhodesia is named after Cecil Rhodes, a pioneer who in 1889 organized the British South African Company. It was also the land of Livingstone. We have pictured the country that he described, the waterfalls, which hamper water transportation, the herds of elephants, the rhinoceros and hippopotami in the rivers, and the lions lurking in the jungle. If

we go to Rhodesia today, however, we shall find that the elephants have largely disappeared, though lions are still to be found back in the bush. Rhodesia is a lofty tableland with a semi-tropical climate and beautiful scenery. It is rich in minerals, especially gold. On the Zambezi River, which flows through Rhodesia, are Victoria Falls, one of the world's mightiest falls and a favorite sight for visitors. The natives call the falls "the smoke that thunders."

Southwest of Rhodesia lies the Kalahari Desert, where there is little rain and the precious springs are few and far between. The Kalahari is not like the usual desert, for it has small trees and bushes and occasional herds of antelope. Its inhabitants are a dwarf race known as Bushmen and Hottentots; their language is one of clicks, made by peculiar movements of the tongue inside the mouth. Each click has a certain meaning. These little brown people wander from place to place without settled habitation, sleeping under rocks or in the shelter of trees and bushes, with a rough lean-to of brushwood. Even in the old days they had no flocks or herds and lived from hand to mouth, existing on the game of the country, which they shot with their bows



EWING GALLOWAY

THE UNIVERSITY OF CAPE TOWN IN A TRULY CLASSICAL SETTING

Devil's Peak (center) rises high above the buildings of the university. The grounds, in Rondebosch outside Cape Town, were the gift of Cecil Rhodes, empire builder par excellence.



BLACK STAR

A BRIGHT DAY IN THE SUN AND SALT SPRAY AT DURBAN, NATAL

The broad beach on the Indian Ocean is close to the heart of the important city. Modern hotels, stores and apartment buildings line a beautiful esplanade beyond the embankment.



DIAMOND MINING IN SOUTH AFRICA

These miners are loading the rock in which diamonds are found into one of the 38 cars they fill each day. Africa, with its large deposits, is the most important producer of gem diamonds.



PHOTOS N. W. AYER AND SON, INC.

THE RESULT OF ONE DAY'S WORK

The diamonds shown are the "take" from the mines in one day—the work of many hundreds of men. The last bits of waste matter are sorted out by hand; only the diamonds are left.



UNION OF SOUTH AFRICA INFORMATION OFFICE

A KRAAL OF THE ZULUS, A CRESCENT ENCLOSURE OF DOMED HUTS ABOUT A SMALLER CATTLE KRAAL

The Zulus, who once inhabited much of South Africa and violently resisted the coming of the Europeans, now live at peace as herdsmen on the grasslands and bleak plateaus of the protected district, Zululand, in northeastern Natal.

and arrows. The bows they made from the branches of trees and the strings from the sinews of wild animals. For warfare they used arrows that were poisoned by being dipped in juice obtained from a plant or from a certain caterpillar. They still follow their old form of life, and when brought into touch with civilization they often pine away and die.

The Bushmen are especially interesting because their ancestors painted pictures of animals on rocks and in caves. These pictures are really amazing, considering that they were done by primitive men. They are finished with an accuracy that we cannot surpass today, and are still in a wonderful state of preservation. The Bushmen once occupied all South Africa from the Cape to the Zambezi, but they have gradually been driven before other and more powerful tribes, until now they inhabit only the Kalahari, Bechuanaland and Southwest Africa.

Living close to nature, they are wonderfully active and notice everything that is going on around them. They have a highly developed sense of direction and can find their way about on the darkest night. Though very small, they are incredible eaters. One man, it is said, will eat half a sheep at a sitting, and for him to dispose of forty to fifty bananas at a meal is nothing uncommon.

The Bushmen's homes are simple affairs. As the tribes are constantly on the move, their household goods consist of a few earthenware pots, spears and clubs for hunting and for use in warfare, ostrich eggs to carry water, tortoise-shells for holding food when in camp, and a few skins of wild animals to serve them as rugs and blankets. The Bushmen make excellent hunters; once an animal is wounded they follow it up until it is exhausted. Their powers of endurance are equal to those of the wild beasts, and they will run down a wounded antelope on the hottest day, keeping their quarry constantly on the move and allowing it no rest until it drops. A party of Bushmen once pursued a wounded giraffe for a distance of more than forty miles; then, when they had killed it, they went back the same



REST HUTS offer shelter to travelers in the Drakensberg Reserve, one of South Africa's playgrounds. The country has several sanctuaries for the surviving wild-animal life.



PHOTOS. UNION OF SOUTH AFRICA GOVERNMENT INFORMATION OFFICE

A CAVALCADE of adventure seekers rides up into the Drakensberg Mountains. The range along the western frontier of Natal ends in vast walls of rock over ten thousand feet high.

distance to bring up their families to indulge in the feast.

The Bushmen's knowledge of the habits of animals is probably unsurpassed. They seem to know exactly what an animal is going to do. They will watch a flight of bees high up in the skies where it is practically invisible to a white man. They will follow it until they reach the tree where the bees have their combs and steal the honey.

The Bushmen have many quaint beliefs. They say that when one of their number dies his spirit goes on a long journey until it arrives at a place where others have gone before, and that when they meet they share the hunting-grounds together. To them the wind, the dust, storms, lightning and all things in Nature are associated with spirits and are regarded with considerable fear.

They also believe that men and women can, in another existence, change themselves into animals. They regard natural phenomena as living things, but they do not worship either the sun or the moon. They remark, however, that the sun retires to bed each night and gets up in the morning like a human being.

Huge Hats of the Herrero Women

Southwest Africa, which was German territory until the end of World War I, is inhabited by the Herreros, a pastoral tribe whose dress is especially remarkable. The women wear huge caps made of skins, which terminate in three points like horns and from each of which hangs an ornament. The weight of this head-dress is often great, yet, despite the heat and the discomfort, no Herrero woman would dream of appearing without her hat. In addition to this she has heavy metal ornaments, and her arms are covered with bracelets or what appear to be pieces of metal piping.

The customs of the Herreros are often cruel; for instance, those who are suffering from some disease which is believed to be incurable are left in a hut in the jungle until death or some wild animal makes an end of them. Old people are treated in the same way.

Hero of a Famous Duel

In Natal we find the Zulus and the Swazis, whose manners and customs are somewhat similar, as the Swazis fell under the dominion of the newly constituted Zulu nation in the early nineteenth century. Before the Zulu War in 1879 this tribe was organized into regiments and constantly engaged in wars and war-like preparations. They lived in large villages of huts, as they do now, and waged war on all the neighboring tribes, establishing such a reputation for ferocity that no tribe could oppose them.

When a Zulu army returned from any expedition, the men were paraded before the chief, who directed them to bring out any who had shown fright in warfare. These unfortunates were instantly killed as an example to the others. Much of the influence that Great Britain afterward acquired over the Zulus was due to a British subject, Colonel Johann Colenbrander, who lived for years among them.

He is said to be the only white man who has ever killed a Zulu warrior in single combat. The great duel took place on uneven ground, and just at the beginning of it the white man's weapon was rendered useless by a blow from the Zulu's battle-ax. The latter also carried an assagai. But the white man closed with him and after a desperate struggle actually succeeded in lifting the Zulu in the air, working his spear around him and impaling him on the weapon.

Plantation Coolies from India

Many of the native inhabitants of South Africa are employed as servants or farm laborers or in the gold and diamond mines and factories. They regard this work as being only temporary, and when they have earned sufficient money to buy a wife or some land they give it up.

Until immigration from India was prohibited in 1911, thousands of Indians came to South Africa. Today, in the districts where tea is grown, many of their descendants work on the plantations.

Sugar-cane has been planted successfully in South Africa. Indeed, large



UNION OF SOUTH AFRICA GOVERNMENT INFORMATION OFFICE

PICTURESQUE HERERO WOMEN on the streets of Windhoek, capital of South-West Africa. The proud Hereros, a wandering pastoral people, were once the ruling group in their region.



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A YOUNG ZULU GIRL DISPLAYS HER MUSICAL SKILL

At an agricultural show in the Melmoth district of Natal, South Africa, a Zulu girl demonstrates a musical instrument that consists of one string and a bow. The Zulus are handsome and sturdy people. Once they were all-powerful in South Africa. The most important crop in this section is sugar-cane, and many Zulu families derive their living from it.

FROM CAPE TOWN TO ZAMBEZI

areas are given over to sugar-growing. Here too we shall find Indian coolies extensively employed on the plantations; but

if we go into a Natal sugar refinery we shall see "black boys" at work operating the machinery.

FROM CAPE TOWN TO THE ZAMBEZI: FACTS AND FIGURES

THE UNION OF SOUTH AFRICA

A sovereign state of the British Commonwealth, consisting of 4 provinces—Cape of Good Hope, Natal, Orange Free State and Transvaal—is bounded on the north by South-West Africa, Bechuanaland and Southern Rhodesia, on the east by Mozambique, Swaziland and the Indian Ocean, on the south by the Indian Ocean and on the west by the Atlantic. Area, 472,494 square miles; population, 15,000,000. A governor general is assisted by an Executive Council (Cabinet) which is headed by a prime minister. Parliament consists of an 80-member Senate and a 136-member House. Only whites may be elected. Monetary unit, the pound. Crops: wheat, barley, oats, mealies (corn), citrus fruit. Wool production important. Industries include metal, food and chemical processing; construction; clothing manufacture, and publishing. Mineral products include gold, diamonds, coal, copper, asbestos and manganese. Exports: wool, diamonds, base metals, fruits and nuts, coal, chemicals, footwear and beverages. Imports: food and drink, vehicles, textiles and machinery. Railways, 13,400 miles; roads, 27,400 miles; domestic and foreign air service; 613,000 telephones, and international radio-telephone connections. Christians predominate; there are Jews, Muslims and Hindus. Primary education free and compulsory for whites; primary and secondary free for all races. Schools segregated. Schools of all types, including facilities for handicapped. Nine universities. Populations of chief cities: Johannesburg, 1,030,000; Cape Town (legislative capital), 709,000; Pretoria (executive capital), 335,000; Durban, 613,000.

HIGH COMMISSION TERRITORIES

Basutoland, Bechuanaland and Swaziland are under executive and legislative control of a British High Commissioner. Supervision of each is vested in a Resident Commissioner.

Bechuanaland Protectorate. Bounded west and north by South-West Africa, east by Southern Rhodesia and Transvaal, and south and southwest by Cape Province; area, 275,000 square miles; population, 300,000. Resident commissioner is at Mafeking, Cape Province. Chief exports are livestock and hides. Public and private schools, 170, and 1 teachers' school.

FORMER MANDATED TERRITORY: FACTS AND FIGURES

SOUTH-WEST AFRICA

Bounded on the north by Angola and Northern Rhodesia, on the east by Bechuanaland, on the southeast and south by Cape Province and on the west by the Atlantic; area, 317,725 square miles and population, 539,000. Mandate, granted by League of Nations to Union of South Africa in 1920, has been in dispute since dissolution of the

Basutoland Protectorate. Bounded on the west and north by Orange Free State, on the east by Natal and on the south by Cape Province; area, 11,716 square miles and population, 640,000. Leading exports: wool, mohair, sorghum, corn and wheat. All types roads, 932 mi. There are about 1,000 schools and over 100,000 pupils. Resident commissioner at Maseru.

Swaziland Protectorate. Bounded east by Mozambique and Natal and south, west and north by Transvaal; area, 6,705 square miles; population, 237,000. Resident Commissioner is at Mbabane. Chief exports are cattle, hides and skins, tobacco and butter. In 246 schools there are 18,500 pupils. Roads, 1,145 miles.

MOZAMBIQUE (Portuguese East Africa)

Bounded on the north by Tanganyika, Nyasaland, Northern Rhodesia; east by Mozambique Channel; south by Natal; west by Swaziland, Transvaal, Southern Rhodesia. Area, 297,732 square miles; population, 6,170,000. There are a governor general, a Government Council of officers and elected members of agricultural, commercial and industrial groups, and an Executive Council. Chief products: sugar, corn, cotton, copra, sisal. Mineral products include coal, bauxite, salt, chrome, gold, silver. Monetary unit, the escudo. Railways, 2,324 mi.; all roads, 23,083 mi.; telegraph lines, 7,807 mi.; telephones, 7,331. There are 1,695 schools with about 206,000 pupils. Populations of chief towns: Lourenço Marques (capital), 99,000; Beira, 42,500.

MAURITIUS (British Colony and Dependencies)

Island and dependent groups in the Indian Ocean. Area of Mauritius, 720 square miles; population, 615,000. Area of island dependencies—Rodrigues, Chagos (Oil) Islands, Agalega and St. Brandon Group—98 square miles; population, about 15,000. Under a governor and Executive and Legislative councils. Leading exports are sugar, rum and aloe fibers. Railways, 82 miles; roads, 716 mi.; telegraph lines, 218 mi. Monetary unit, Mauritius rupee. Hindus predominate; there are Roman Catholics and Protestants. Education free; government, government-aided and unaided schools, 306; government colleges. Port Louis (capital), pop., about 101,000.

league. An administrator, appointed by the governor general of the Union, is assisted by an Executive Committee and an 18-member Assembly. Leading exports are diamonds, lead-copper concentrates, zinc, vanadium. Railways, 1,470 mi. European schools, government and private; colored and native, mostly missionary. Windhoek (capital), pop., 29,700.

Malagasy

Republic ... island of Madagascar

ISOLATION is the Malagasy (or Malgache) Republic's key problem. Some eighty airfields are scattered over the island but transportation of cargo by air still cannot compete in cost with transportation by sea, and the Republic is remote from the world's major shipping lanes. In addition the island is so compact, with an unusually regular coast line, that it has few good harbors. And in view of its large size (fourth largest island in the world), to reach any of the few harbors means, first, expensive shipment by rail. All this puts the Malagasy Republic at a distinct disadvantage in world trade at the same time that trade is essential to its economic health.

In a recent year the United States imported almost 75 per cent—nearly a million pounds, worth \$7,176,000—of its vanilla from the island, the world's chief source of the natural flavoring. This aside, however, much the larger part of the Republic's trade is with France: around 60 per cent of the exports and 70 per cent of the imports. The Republic is further dependent on France to finance much-needed development—improved agricultural methods, industry, transport, power.

Long-smoldering unrest among the Malagasy, fed partly by tribal resentments as well as the nationalist fervor stirring throughout Africa and Asia, came to a head in 1947. Before the revolt was completely put down, in 1948, thousands of persons lost their lives—some sources claim as many as eighty thousand—and there was extensive damage to property of all kinds.

Thereafter the French greatly increased their efforts to improve conditions, along social and political lines as well as eco-

nomic. Co-operative societies were encouraged, fertilizers and improved seeds were introduced, old coffee trees were replaced, and modern methods and control of quality were applied to the processing and export of the coffee beans. Though coffee is the most valuable export the island fortunately is not dependent on one crop. We have mentioned vanilla and there is an astonishing variety of other export crops: rice, cloves, tobacco, raffia, peanuts, sugar, tapioca, essential oils, sisal, peas, pepper. Cotton has been introduced. Many of these products, however, are of the sort that take up trifling shipping space in proportion to value. Little of the island's excellent hardwood, a bulky product, enters world trade. Moreover, fires and wasteful use have denuded vast interior highland areas of their once thick forest cover.

Some light industries have been started, producing canned and frozen meat, leather, rum, soap, silk and cotton goods, cement, bricks, refined sugar and rice. There are no raw materials at home, however, on which to base heavy industry. Iron ore is lacking and what coal there is, is of poor quality. On the other hand there are numbers of mountain torrents that





FRENCH EMBASSY PRESS & INFORMATION SERVICE

HUGE KNOBS of rock scarred with gaping fissures rise in western Madagascar. The island's interior, a plateau, is distorted by mountain ranges and volcanic masses.

could provide hydroelectric power, power that is essential to industrial development.

Education is making gradual progress. Some 66 per cent of the population is illiterate. Nevertheless, by 1958 almost half the children of school age were attending classes. There are schools of medicine, law and administration at Tananarive.

Though there is some friction between the more remote inland tribes the Republic is happily free of racial problems. In its total population of more than 5,000,000 there are about 80,000 non-Malagasys. Most of these are nominally French but there has been so much inter-marriage that many of them are really of mixed descent, with Chinese or Hindu ancestors as well as Malagasy.

In spite of pockets of remaining resentment and anger, relations with France did improve noticeably after the revolt of 1947. This, coupled with the need for continued French help, no doubt played a large part in the Malagasy's de-

cision to vote for self-government within the French Community in 1958. Madagascar then became the Malagasy Republic though such matters as defense, foreign relations and the like were placed in the hands of the Community. The new Republic adopted a constitution in April 1959. In 1960, however, with surprisingly little fuss, it won complete independence. At the same time it remained a partner in the French Community, in turn revised to allow for such relationships. In declaring the new status of the island, President Philibert Tsiranana said: "Malagasy patriots have been seeking independence for a long time. Now the thing is done." He added further, "To have independence is not only to work together hand in hand, but also to have the certainty that France has promised us her aid, that she considers us as her young brother, that she will help us in our march forward, that she will permit us to evolve and that her aid will serve to realize our independence."

The island is an oval and so little indented that it has a coast line of only three thousand miles. Of the few ports—Tamatave, Majunga, Diégo-Suarez, Tuléar—only Tamatave has modern, but

MALAGASY REPUBLIC

still inadequate, facilities. Diégo-Suarez has probably the best natural harbor but its hinterland has rather meager resources.

Land and Climate

The narrow eastern coast, where it rains all year round, rises sharply to the central highlands. Because of the way they slope they are subject to severe erosion. Lowlands are fairly hot, though trade winds temper the heat on the east coast, but the highlands are pleasantly cool. Cliffs and seemingly endless chains of rounded hills nevertheless make the highlands a road builder's nightmare. On the western side of the island, where the highlands descend to a coastal plain 60 to 120 miles wide, the climate is quite dry. There is just enough rainfall to support grass and this is cattle-raising country.

Possibly this great land mass, which runs for a thousand miles off the south-east coast of Africa, was once part of a land bridge between Africa and Asia. In any event it seems to have been torn from

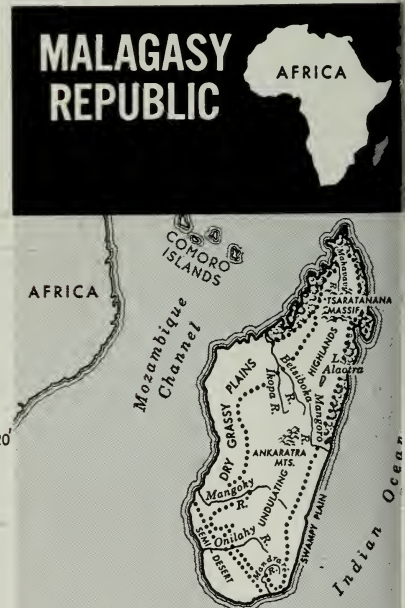
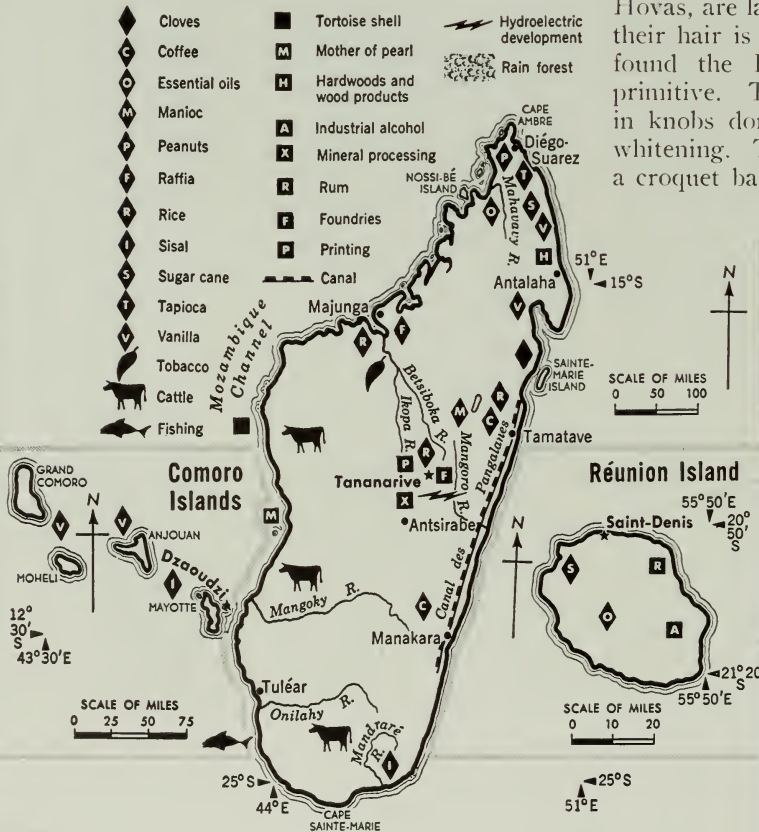
east Africa by some tremendous upheaval of the earth's crust in remote times.

The common language of the island is akin to the Malay spoken in Indonesia. There are also Sanskrit words brought in by Buddhist missionaries from India. Recent studies indicate, however, that the bulk of the islanders are descended from African migrants. This would account for the presence of Bantu-Swahili words in the Malagasy tongue as well as the "cattle culture" of the western plain. On the other hand, the Hova, or Merina, probably sailed along the trade winds from Indonesia some 2,200 years ago. Arab influence is also evident. Arab traders began to reach the island in the twelfth century.

Island Peoples

The Hovas of the central province of Imerina are the most important group today. The word *Hova* really means the middle class of the tribe, as distinguished from nobles and slaves, and the correct name of these people is Merina or people of Imerina.

The Betsileos, who live south of the Hovas, are larger and darker colored and their hair is curly. In the southeast are found the Baras, who are still fairly primitive. These people wear their hair in knobs done up with wax or fat and whitening. The middle knob is the size of a croquet ball, the others smaller. Each





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SEVERAL HUNDRED YEARS AGO some long-horned, humped cattle were brought to Madagascar from Africa. Today they are found in tre-

mendous herds and are responsible for a large part of the island's agricultural wealth. They furnish food and are also valuable draft animals.



IN SOUTHERN MADAGASCAR live the primitive people of the Antandroy tribe. Some Malagasies, like the Antandroys pictured here, clearly show a strong strain of African blood.



PHOTOS, FRENCH EMBASSY PRESS & INFORMATION DIVISION

PIEBALD, FAT-TAILED SHEEP, like many other domestic animals found in Madagascar, are not native to the island but are the descendants of animals introduced from abroad.



THREE LIONS

ANDRIANAMPOINIMERINA rules here! The thatch-roofed and slab-walled palace of a native king of Madagascar scarcely lives up to the splendor of the monarch's name.



FRENCH EMBASSY—INFORMATION DIVISION

WHITE WATER FOAMS OVER THE BARRAGE (DAM) D'ANTELAMITA

Madagascar has splendid water-power possibilities. There are a number of rivers which flow down from the watershed formed by the central highlands. On the east the drop is very rapid. Here streams rush through gorges in a succession of magnificent cascades. A beginning has been made, with such dams as this, to harness the potential power.

knob is quite hard and on some heads you may count as many as one hundred of them. The Baras wear great wooden earrings and around their necks necklaces hung with charms. They love brass nails, and have dozens of them fixed into the butts of their guns, cartridge boxes and powder flasks. The head of each nail is the size of a quarter.

Along the western side of the island there are no fewer than twenty-five tribes, including the Betsimisarakas, the Tanalas, and the Sakalavas, who, before the Hovas rose to power, were the rulers of the whole island.

The natives make rather superior houses, with walls of red clay or planks and high-pitched, thatched roofs with pro-

jecting eaves which are ornamented with quaint wooden figures reminiscent of those used elsewhere on totem poles. The women are clever at plaiting straw and make sleeping mats, as well as wide hats of palm-leaf, and clothing of grass, cotton or tree bark the fibers of which they separate by beating it with wooden mallets. Unfortunately some of the younger set conceive it to be the height of fashion to stain every alternate tooth black. The Malagasy folk eat quantities of rice, which they grow on irrigated land and cultivate with a narrow-bladed spade. The Sakalavas, however, live largely on cassava and sweet potatoes.

In the old days the natives used the blow-pipe—one more way in which they



FRENCH EMBASSY PRESS & INFO. DIV.

PUTTING SCIENTIFIC METHODS TO WORK IN THE RICE FIELDS

Malagasy workers are artificially crossbreeding rice strains in an effort to produce a hardier plant. Rice is the most important vegetable product grown for food in Madagascar.



EWING GALLOWAY

A RICKSHA MEANS QUICK TRANSPORTATION IN TANANARIVE

Residents of Tananarive use a ricksha-type vehicle to travel about the streets. Ricksha boys can run at amazingly fast speeds while pulling and pushing the cart.

resembled the tribes of the Malay Archipelago. Today, though, most of the men have guns, usually modern rifles, besides being sufficiently good metal-workers to forge the iron found on the island into spears and arrowheads, farm implements and knives.

The people keep sheep and cattle. The cattle are like the Indian zebu with a big hump behind the neck. No one knows where they came from, for when the Portuguese first landed on the island, cattle were, even then, the principal riches of the inhabitants. Most of the sheep are of the fat-tailed breed—creatures with black heads and very little wool, whose tails make choice eating, from the native point of view.

Malagasies make dug-outs from single tree trunks for use on the rivers, while the coast-dwellers build large boats made of planks literally sewed together with palm fiber. Some of these are fitted with outriggers like those of the craft used by the South Sea Islanders. The coast tribes are good at catching fish with nets and traps.

Even though Madagascar may have been at one time joined to Africa, it was separated so long ago that the wild life is now quite different from that of the continent. Most of the wild creatures of Madagascar are small and not particularly dangerous. The worst is the foussa, a brown civet-like beast about twice the size of a cat, with a small head, short legs with strong claws and a long tail. It is nocturnal and sometimes carries off lambs and kids, and when wounded defends itself with such ferocity that the natives believe it will attack a man.

Lemurs, monkey-like creatures of which there are many different sorts, are plentiful, and they are found in few other countries. The most puzzling animal is the aye-aye, a nocturnal lemur, about as large as a cat, with big bare ears, eyes which can see in the dark, rat-like teeth with which it cuts into tree trunks in search of the insects on which it feeds, and the most amazing, spidery-looking hands. The third finger of the right hand is as thin as wire, for it is used in picking

THE MALAGASH REPUBLIC

out the grubs from the wood. It sleeps all day and feeds by night. Another queer animal is the tenrec, a spiny creature which lives chiefly on earthworms. It sleeps through the hot weather and wakes when it becomes cool.

Remains dug up in swampy places prove that there existed in Madagascar a huge, wingless bird which has been named *Aepyornis*. It would have made the biggest ostrich look small, for it was fourteen feet high, and its eggs, of which many have been found, are six times the size of ostrich eggs. It is believed to have been living up to a few centuries ago.

No fewer than two hundred and thirty-nine species of birds have been found. There are plovers, rails, herons and other familiar water-birds; also parrots, pigeons, crows, rollers, birds of prey and delightful little honey-eaters—creatures that look like humming-birds. The rivers hold two sorts of crocodile, of which one is peculiar to the island. Both grow to a great size and are dangerous to man and beast. A twenty-foot crocodile will pull

an ox into the water and drown and eat it. There are also poisonous snakes and swarms of stinging insects.

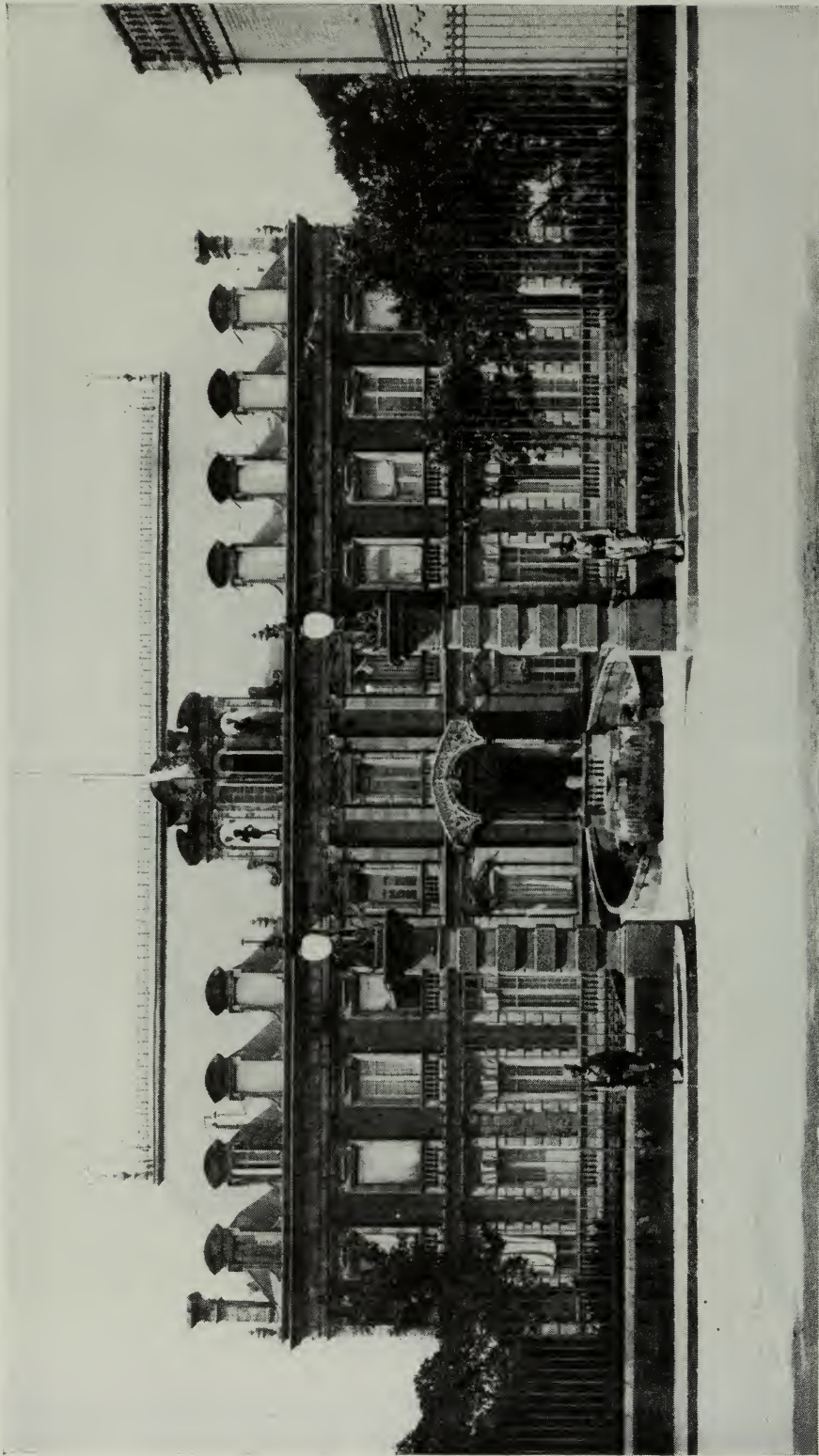
Madagascar, discovered in 1500 by the Portuguese, was for centuries an independent kingdom. The French established trading posts and began colonizing about 1700, and by the Anglo-French agreement of 1890 established a protectorate over the island, which six years later became a French colony. It was thought necessary to depose Queen Ranaivalona III, who had succeeded to the throne in 1883, and eventually she was deported to Algiers. The French have, however, brought about such material improvements as the construction of railroads, the introduction of air service, the irrigation of dry lands and the conservation of valuable forest areas. To date they have constructed almost sixteen thousand miles of roads suitable for motor traffic, a railroad between the capital city, Tananarive, and the chief port, Tamatave, and one southward from the capital to the thermal springs at Ant-



FRENCH EMBASSY—INFORMATION DIVISION

DIEGO-SUAREZ HARBOR, ONE OF THE BEST IN THE INDIAN OCEAN

Diego-Suarez is at the northern end of Madagascar, on a bay of the same name. It has been a naval base for many years. The present town was laid out by the World War I hero Marshal Joffre. A Portuguese explorer, Diogo Soares, gave his name to the bay in 1543. It is also known as British Sound; and one may still hear the native name of Antsirane used.



WIDE WORLD

THE IMPOSING PALACE IN TANANARIVE THAT IS THE RESIDENCE OF THE GOVERNOR GENERAL

Were it not for the native soldiers on guard at either side of the entrance, one might think that this was a scene in France. The mansion is in the French Renaissance style. There is a Gallic air to other parts of the city as well, for it has quite a large French population.



AN AUTORAIL CAR, A COMBINATION OF BUS AND TRAIN

There are only a few hundred miles of railways in Madagascar but almost three times as many miles of autorails. They provide quick and pleasant transportation between towns.



PHOTOS, FRENCH EMBASSY—INFORMATION DIVISION

A POST OFFICE WITH A TROPICAL LOOK IN TANANARIVE

The lattice work walls let breezes sweep through the building—a welcome feature in a hot climate. Overhangs help to shield the interior from the intense glare of direct sunlight.



A PRIMITIVE OX CART, its contents shielded against sun and rain by woven fiber mats, waits before a balconied house in an old section of Tananarive, the island's capital city.



PHOTOS, EWING GALLOWAY

FRENCH ADMINISTRATION has done much to improve Tananarive in recent years, and fine buildings, some of them modern apartments, now line the clean, well-ordered streets.

THE MALAGASH REPUBLIC

sirabe, besides two other lines, one running to the north of the island and one to the east coast. The motor bus service runs on a regular schedule along the main roads to the larger towns; and through the chain of lagoons on the east side a canal has been started which is adequate for small steamers. There is wireless communication with France, and French money is used. A Bank of Madagascar was established in 1925. The capital city is laid out with wide streets and other evidences of French influence.

From the steamy coastal plains rubber and vanilla are produced, and there were, by the latest statistics, some 1,400,000 acres sown to rice, the staple native food crop. While portions of the coast are desertlike, the great riches of the island are the coastal forests, which are full of such valuable timber as ebony, as well as gums and resins. But it will be many years before the forests can be extensively opened up, for the climate is deadly to white men. Cattle have been reared since the early days.

MALAGASH REPUBLIC: FACTS AND FIGURES

THE COUNTRY

A large island in the Indian Ocean off the southeast coast of Africa, from which it is separated by the Mozambique Channel; the nearest distance between island and continent is 240 miles. Estimated area, 227,800 square miles; population is about 5,000,000.

GOVERNMENT

A self-governing republic within the French Community established in 1958. Has a premier, cabinet and representative assembly. Foreign relations, defense and some economic functions come under the Community. In changing their form of government the Madagascans chose to call themselves the Malagash Republic.

COMMERCE AND INDUSTRIES

Cattle-breeding and agriculture are the chief occupations. Forests contain valuable woods as well as plants that yield rubber and resins, and dyeing, tanning and medicinal products. Leading crops are cassava, rice, corn, potatoes, coffee, haricot and French beans, sugar and tapioca. Livestock, 6,762,000 head. Industries include textile-weaving, metal-working and hat-making as well as meat-packing and other food-processing. Graphite is the principal mineral; mica, gold and precious stones are also produced. Exports: coffee, tinned meat, cattle and crocodile hides, vanilla and cloves. Leading imports are cotton cloth, machinery, petroleum products, metalware, autos, clothing, silk and rayon cloth and jute bags. Monetary unit, Malagasy franc.

COMMUNICATIONS

Regular coastwise steamer service between principal ports. Railways, 534 miles; motorcar service of 1,375 route miles; all-weather roads, 10,400 miles; telegraph lines, 10,383 miles; telephones, 10,500; 13,000 passenger cars; 5 air-lines.

RELIGION AND EDUCATION

Catholic and Protestant missionaries have Christianized many native tribes; there is a considerable Moslem population. Education is compulsory, for Europeans between 6 and 14

years of age and for natives between 8 and 14; secondary and higher-grade schools are also provided. Enrollment of 236,000 in public and private schools. There are college faculties and public service, technical, vocational and agricultural institutes and colleges.

CHIEF TOWNS

Populations: Tananarive (capital), 193,000; Majunga, 48,600; Tamatave, 46,000; Diégo-Suarez, 38,000.

ISLAND DEPENDENCIES

Nosy-Bé (area, 130 square miles) off the northwest coast, and Sainte-Marie (64 square miles) off the east coast, as well as Europa, Juan de Nova, Barren, Bassas da India and Glorieuses, all in surrounding waters, are governed by the High Commissioner. Other dependencies, far to the south and east, are Crozet Islands (181 square miles), Amsterdam, St. Paul and Kerguelen islands (2,405 square miles) and Terre-Adélie, south of Australia in Antarctica.

COMORO

An archipelago between Madagascar and Africa in the Mozambique Channel; area, 838 square miles, and population, 176,000. It is an overseas territory with representation in the French Parliament and the French Community. Production of sugar, once the chief product, has declined; vanilla and sisal are the chief exports. Dzaoudzi, on Mayotte, is the capital, population, 3,000.

REUNION

An island, 420 miles east of Madagascar; area 970 square miles, and population is about 310,000. It is an overseas department, under a prefect and an elected council of 36 members, with 3 Deputies and 2 Senators in French Parliament. Chief products and exports are sugar and rum. Other products include manioc, tapioca and vanilla. There are about 260 primary schools and 2 lycées. Served by Air France and three steamship lines. Roads, 537 miles; railways, 80 miles. Chief towns: Saint-Denis (capital), 42,000; Saint-Paul, 28,700.



Indonesia ... a republic of three thousand islands

THE Republic is an arc of equatorial islands that swings across the seas from the southeast tip of the Asian continent down to the northern tip of Australia. Thus the arc sprawls across one sixth of the world's circumference, over an area of tropical seas that is greater than the span of the Atlantic. Indonesia is therefore one of the most split-up sovereign states in the world. Some 2,900 of the islands have no means of regular communication beyond their own shores, whether by boat, plane, cable, mail or telephone. One little Indonesian island may know less of its neighbor than the average newspaper reader on the other side of the world knows of them all. However, some 90 per cent of the Indonesians share a faith in common, Islam. The Republic is the largest Muslim nation on earth.

Yet though some of the islands have always been primitive, others have known a high level of culture and can boast a proud history. The Western world sometimes forgets that many parts of the Far East had advanced civilizations at the time

Europe was just creeping out from the ruins of the Roman Empire. In some Indonesian islands, particularly in Java, literature and certain arts leaped forward in early (Western) medieval times. There were a number of kingdoms, with elaborate courts and ceremonials. Unfortunately, by the fifteenth and sixteenth centuries they had grown feeble.

So it was that when the Portuguese and Spanish and, later, the Dutch came to the islands, the kingdoms could put up little real resistance. By the middle of the seventeenth century the Netherlands was in practically complete control, and the islands came to be known as the Dutch East Indies. The Indonesians, by and large, sank into a state of apathy.

The word "colonialism" has such unpleasant meanings today that it is all too easy to be unfair to the Dutch. They brought energy and enterprise to the tropics. Such islands as Java are so exuberantly fertile that then (and now) enough to eat could be gathered with little effort. The needs for shelter and clothing



party. At first it advocated self-government for the islands with Dutch co-operation. The party split in 1921, and the more extreme group set itself up as a communist party. During the 1920's and 1930's there were clashes between the Indonesian nationalists and the Dutch. Some of the Indonesian leaders were either imprisoned or exiled—or both.

The birth of the Republic

Thus matters stood when the Japanese swept down on the islands and occupied them from 1942 to 1945. The Indonesians were not much more fond of the Japanese than they were of the Dutch. However, the Japanese, for their own purposes, encouraged resentment against the Dutch. Whereas only a comparatively few Indonesians had been actively interested in self-government before, the idea now became widespread. At war's end, in 1945, when the Japanese forces withdrew, the Indonesians proclaimed themselves a republic. It took several years of violent struggle, however, before the Dutch would acknowledge the new nation. Sovereignty was won in 1949 and the next year the Republic was established.

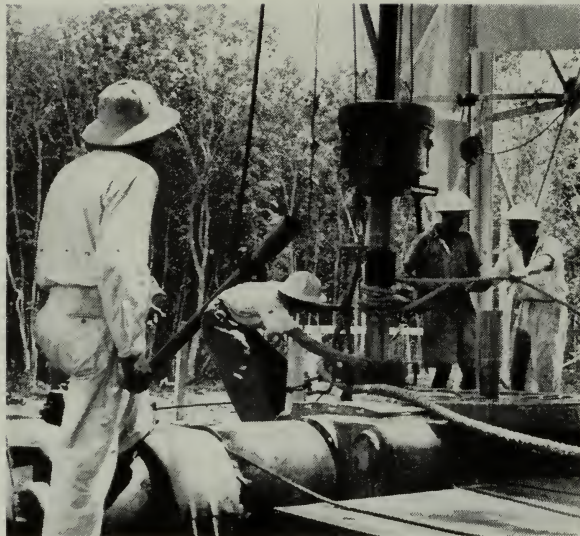
It was faced with enormous problems. Natural wealth, no matter how bountiful, has no value until it is processed and marketed. Yet few Indonesians had had any experience in managing plantations or mines or businesses. Moreover, the islands had supplied world trade chiefly with raw materials. Indonesia had barely any industry; and industry, with modern technology in its train, is essential in transforming an underdeveloped country into an advanced nation. This takes capital, which had come from the Dutch before. So Indonesia was caught in a vicious economic circle. The country's economic position has remained precarious.

For a few years it was absolutely necessary to keep many Dutch managers on the job. In the mid-1950's, however, most of the Dutch were forced to leave. Only about eight thousand were left by 1959. That same year practically all the remaining Dutch holdings, worth about a billion dollars, were nationalized.

are likewise easily met in so warm a place.

Without the Dutch, therefore, it seems unlikely that the tin mines, the oil wells, the rubber, pepper, quinine, sugar, coffee and tea plantations would have been developed. The unhappy side of this picture is that most of the income from these enterprises flowed back to Holland. The islanders benefited very little, though they supplied the hard manual labor. Banks, businesses, shipping were all managed by the Dutch. Some Indonesian princes—usually sultans—were allowed to maintain a certain amount of pomp but their real authority was severely limited. Though the Dutch introduced an educational system for the islanders, it did not go much beyond an elementary level. About the highest training it offered to an Indonesian was for a clerkship.

Discontent with this state of affairs was smoldering long before World War II. In spite of the difficulties in getting an adequate education, there was already a small group of Indonesian intellectuals by the early 1900's. They formed a political

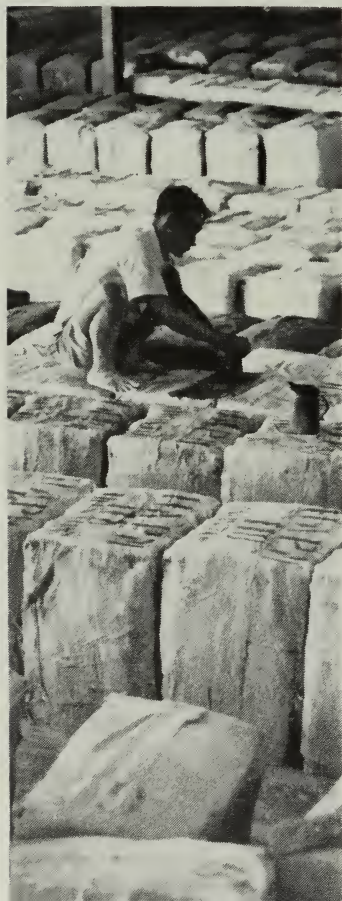


REPUBLIC OF INDONESIA INFORMATION OFFICE

INDONESIAN TECHNICIANS rig a new oil well. Development increases need for trained personnel.

Industries and communications

BAILING and packing raw rubber for shipment.



UNITED STATES RUBBER CO

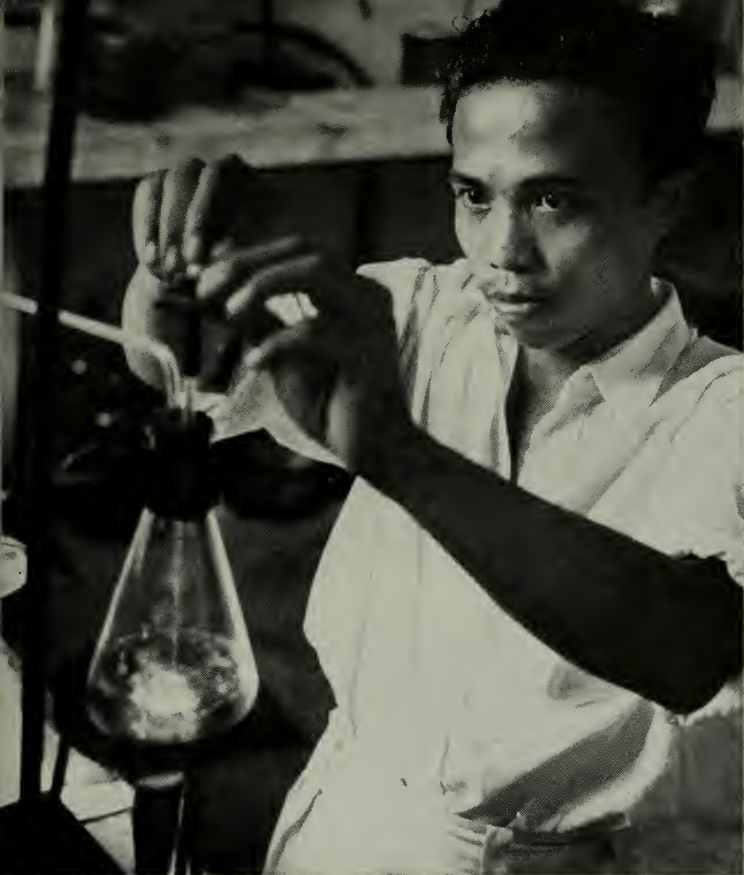
A MODERN ROAD spans a canal in the most advanced part of Indonesian Borneo.



ALL BLACK AND WHITE PHOTOS, UNLESS OTHERWISE INDICATED.
HARRISON FORMAN

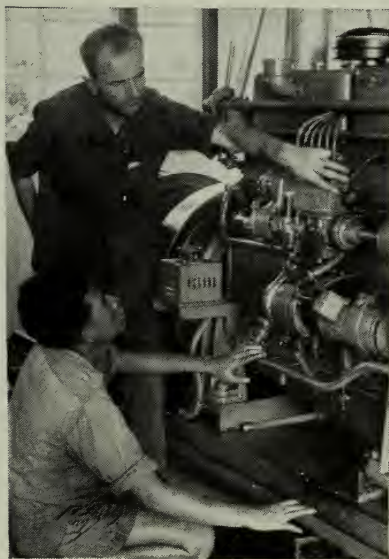
EAGER READERS scan the latest edition of a newspaper. Newspapers are common.



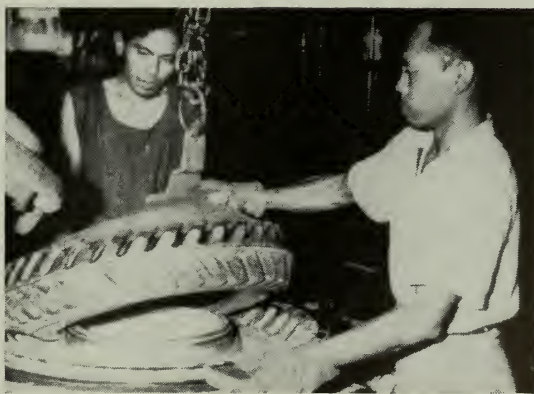


UNITED STATES RUBBER CO.

TRAINING IN CHEMISTRY is given a young Indonesian who will apply his scientific lore to rubber production.



REPUBLIC OF INDONESIA INFORMATION OFFICE



TIRE MANUFACTURE. Indonesia was once a supplier only of raw rubber.

“ A YOUNG MAN from a mountain village learns mechanics—needed in industry.



A STRIP OF FILM is examined in a motion-picture studio.



COLLEGE FOR FARMERS. Students note the results of an experiment.

Education presents another big problem, overlapping economics. Skilled technicians and high-level managers are needed. There is equal need for training in the professions and in government. Nevertheless, considerable strides have been made. Illiteracy among adults has been reduced from about 90 per cent before the war to 40 per cent. The universities are expanding rapidly.

Political conflicts among the Indonesians themselves have also plagued the Republic. Always thriving on unrest, the Communists have become one of the chief parties. Indonesians know that their country needs industrialization, and they are impressed by the achievement of the Russian Communists in industrializing the U.S.S.R. in less than half a century. So it seems to some Indonesians that quicker results could be obtained in their own country by communist rather than democratic methods. In recently independent countries such as Indonesia, this is the main attraction of communism and not communist ideas as such.

Natural resources in abundance

Nature has buried great wealth in the Indonesian islands. Valuable layers of minerals are strewn through them like bags of treasure. Moreover, most of the islands lie in a volcanic belt with more than seventy active volcanoes. Thus the soil is being replenished constantly, and it is

fabulously fertile. From this bounty Indonesia produces oil, tin, bauxite, manganese ore, rubber, kapok, copra, rice, sugar cane, palm oil, tea, tobacco, coffee, quinine and spices.

The islands were originally mountain peaks which at one time rose up from vast land masses. The land was later submerged by waters from the melting ice age, leaving the mountain peaks standing alone as islands. What is today the submerged Sunda Land Shelf was once, it is supposed, the southern tip of the Asian continent. The submerged Sahul Land Shelf was probably a northern extension of the Australian continent.

AN ATTRACTIVE HOME at Kebajoran, model town near Jakarta.

PHOTOS. REPUBLIC OF INDONESIA INFORMATION OFFICE





PHYSIOLOGY CHARTS engross the attention of a university class. Indonesia has enormous need of doctors as well as other trained professionals.

Geologically, therefore, the islands fall into three groups. One group rises in shallow seas over the Sunda Shelf, off the southern tip of Asia. This group includes the Greater Sunda islands of Sumatra, Java, Borneo (Indonesian part, Kalimantan) and Celebes (Sulawesi). The second group lies in shallow seas above the Sahul Shelf, off the northern tip of Australia. This group corresponds roughly to the Lesser Sunda islands (Nusa Tenggara), including Bali and Timor. The third group lies in the great depths of sea between the land shelves. In general this last group takes in the Moluccas (Malaku), including Halmahera and Ceram. The Moluccas are surrounded by unstable seas compared to which the calm, pale blue waters of the Sunda and Sahul shelves are like children's wading pools.

The Greater Sundas

Let us take a closer look at the islands and their people, beginning with the Greater Sundas. Sumatra lies just across the tepid water of Malacca Strait from Malaya. Sumatran mountains rise to 12,000 feet and include eleven active volcanoes. The most famous is Korinchi (Celestial Abode). Almost any climate may be found in Sumatra according to altitude. On the spectacular highland plateaus the climate is delightful. Almost anything will grow, though Sumatra's greatest resource is not above but in the

ground. Secreted between ancient folds of the earth's crust and held captive above layers of even more ancient rocks lies oil, one of the richest pockets of this mineral in the Far East.

Across the middle of Sumatra live the coastal Malays, and the Menangkabaus who are also Malayan. The native state of Menangkabau, which dates from the eighteenth century, is today the heart of Islam in Indonesia. There religion shapes the pattern of living and is a code of conduct. The code, however, is different from that practiced by most Arab Muslims, in the Middle East.

Among the Menangkabau, inheritance passes through the female line. The chiefs of a *suku*, or clan, are women. After marriage the man goes to live with his wife's family. Groups of families live together in a common house, though each family has separate rooms. Land is di-

WALLACE'S LINE slants between Borneo and Celebes. Gray islands lie over the Sunda Shelf; black, Sahul Shelf; white, deep sea.





A CHILD'S COPY of an intricate Hindu drawing.

Artistic
talents are
encouraged

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PAINTING a vase in the pottery shop of the Academy for Plastic Arts, Bandung.

A GAMELAN MUSICIAN tests his huge gongs before playing in a dancing school.





DANCING CLASS in the open air, in Java. Boys as well as girls are trained

in the steps and postures. Western shirts contrast oddly with sarongs.

LEARNING TO PLAY a gamelan. The gongs are hung in an elaborately carved, low frame.



AN EXPERT drums on a gamelan. In this instrument the gongs are arranged horizontally.



CLOSE-UP OF BATIK. The girl's sarong displays a delicate pattern.

INDONESIA

vided into village tracts, and each village is self-governing.

The houses are built five feet above ground on tall poles which extend through the interior to form partitions. Each house has a roof patterned after the shape of a buffalo horn. Actually the roof looks more like a saddle, with an upturned point at either end on which is placed a horn. Some houses have several roofs, one partly tucked under the other, and many have four buffalo horns on the roofs. The roofs may be further adorned with brilliant flowers and tin ornaments. House walls are elaborately painted and carved. A village of such dwellings is highly decorative.

The northeastern end of Sumatra is the stronghold of the Achinese, who resisted the Dutch stoutly for two hundred years. They have an aristocratic social organization consisting of nobility, commoners and servants. Their houses stand on wooden piles but lack the ornamental qualities of the Menangkabau homes. They are an intelligent people, determined, and good workers. Musical, they love to sing and recite poetry. Both men and women wear trousers, jacket and vest, instead of Malay costume.

The staple food of the peoples of Sumatra, and Java as well, is rice with

various kinds of vegetables and sometimes fish, especially on the coast.

Mountain ranges run the length of Java's southern coast, and a wide plain bulges on the north. Though Java is one third the size of Sumatra, it has twice as many active volcanoes. So fertile is Java's soil and so regular is its rainfall that this single island supports more than two thirds of the Republic's population.

Jakarta, the capital

Java is the economic and administrative pulse of Indonesia. The capital city of the Republic, Jakarta (which the Dutch called Batavia), is on the northwestern tip. Some beautiful eighteenth-century Dutch colonial buildings still stand. However, a good part of the city is on the shabby side. The Indonesian Government is trying to combat this and meet the need of the swelling population by building model towns, such as Kebajoran, in the suburbs.

Jakarta's nearby port, Tanjungpriok, is the gateway for Indonesia's foreign trade. Most of its exports of tea, coffee, rubber, quinine and spices passes through this port. It has an artificial harbor which was built by the Netherlands around 1900. A railway connects the port, through Jakarta, with a network of lines that extend

OVERLAPPING ROOFS, each turned up in the shape of a buffalo horn, adorn the house of a Menangkabau clan, Sumatra. Walls are adorned.





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VILLAGE TILE FACTORY. The tiles will be used as roofing for new dwellings.

throughout Java; no areas are isolated.

At Java's narrow waist of land, just south of center, stands Jogjakarta. It is a sultanate, though the ruling prince has little power these days. The center of the town is a walled citadel, dating from 1760, which spreads out over a square mile. Jogjakarta was the heart of the rebellion against the Dutch and was the Republic's first capital.

Near Jogjakarta is the most dangerous and active volcano in Java, Merapi (Fire Mountain). It repeatedly disgorges huge

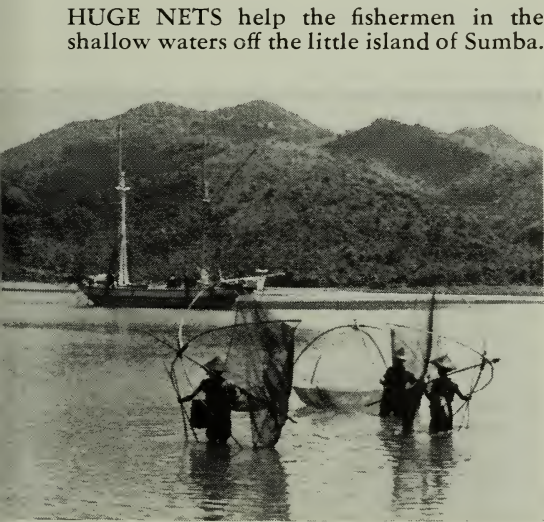
lava flows and lethal clouds of scorching ash, wiping both human lives and rice fields from its slopes. Yet it remains the center of farming life. The treacherous gift of the eruptions binds the villagers close, though the result may be death rather than riches. Today a siren warns the people of expected eruptions.

Wayang kulit

Java is celebrated for its bewitching *wayang kulit*—a shadow play with puppets. The goblinlike puppets, about twenty inches tall, are made of cutout leather. They are manipulated from the side by sticks attached to their limbs. The play is enacted on a white sheet illuminated from behind. As the puppets carry out the action of ancient myths, their handlers recite the stories in verse, giving their dramatic quality full rein.

Although the people of Java profess Islam, their observance of it is tinged by ancient Hindu creeds and even by still older beliefs. No Indonesian women are veiled. In Java especially they have considerable freedom and may be seen walking side by side and hand in hand with their husbands or sweethearts.

CATTLE being shipped from Sumbawa (in the Lesser Sundas), noted for cattle raising.



HUGE NETS help the fishermen in the shallow waters off the little island of Sumba.





BILL STAPLETON, RAPHO GUILLUMETTE

ON THE JAVANESE PLAIN a farm lad rides one of his charges, water buffalo.

Daily life in the far-flung Republic

DEEP IN THE JUNGLE of central Sumatra a surveyor helps to map a rich oil field.

CONTRAST IN JAKARTA—a modern movie theater and an old-time betjak.



CALTEX



BILL STAPLETON, RAPHO GUILLUMETTE



VAN BUCHER PHOTO RESEARCHERS

REEF-GIRDED ISLANDS in the Java Sea, as seen from the air, illustrate one of the Republic's problems—unification.

FARMERS' THATCHED HOUSES overlook the terraced rice fields that climb a mountain.



YAMHOF NOSTRUP

BANDUNG, western Java, is both an industrial city and a mountain resort.



VAN BUCHER PHOTO RESEARCHERS

FLUFFY CLOUDS veil the summit of Mount Salak, a volcano 7,254 feet high in western Java. The scene is typical of the Javanese countryside, where plants grow exuberantly in the enormously fertile volcanic soil.

»

There are three different groups of people in Java. The largest and dominating group, the Javanese proper, lives in the eastern two thirds of the island. The other groups are the Sundanese, of western Java, and the Madurese of Madura Island, an administrative part of Java.

Religions and arts from India

The Javanese is a living reminder of the thousand years or so that Indonesia was strongly under Indian influence. Trade with India was already flourishing by the first century A.D. Merchants and immigrants carried the Hindu religion to the islands. Some centuries later, Buddhism followed by the same path. These influences were civilizing. Besides religion, the arts of sculpture, dance and literature were introduced and reached high peaks of achievement. At the same time many words came into Indonesian languages from Sanskrit, the ancient tongue of India.

Of all the islands, Java was the most affected by things Indian. It was during this period that Borobudur, the superb Buddhist temple, was built near Jogjakarta. A magnificent Hindu temple group, Lara Jonggrang, was erected at Prambanan, in the same area, a century later. Both Borobudur and Lara Jonggrang, however, have distinctly Indonesian elements.

Arab traders bring Islam

Islam came with Arab traders in the thirteenth century and spread like wild fire. Only the Balinese have kept the older faith of Hinduism. This is apart from the Chinese, mostly Buddhists.

Although no extreme form of the Hindu caste system ever flourished, Javanese social structure is built nevertheless on rank and title. There are four distinct classes, based on the kind of property



AVA HAMILTON

held. Owners of rice land are class one; of garden land, class two; and of houses, class three. In the lowest class are those who have no permanent homes.

The Javanese house is built on ground level with a floor of tamped earth. With bamboo walls, a palm-leaf roof, a sleeping place, which is usually set off by a partition, and sometimes a veranda and a bath-room, this house is well ahead of the average island abode. Each dwelling has a garden with palms, fruit trees, and a vegetable plot. Crimson hibiscus, purple bougainvillea, and the glossy green of gardenia shrubs add vivid color. Often there is a pond in which glittering goldfish—which are really small carp—are being fattened for food.

Javanese literature

Javanese, the island language, is only one of several hundred Indonesian tongues. All but Melanesian have some relation to Malay, as does the official lan-

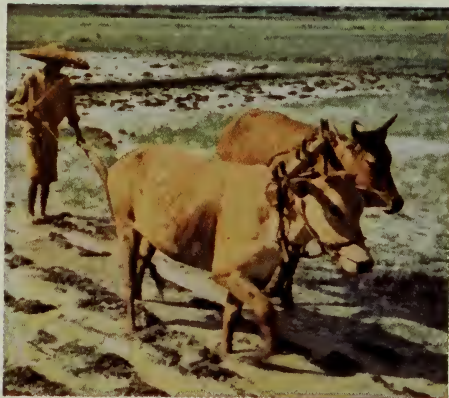


guage. Bahasa Indonesian. English is taught as a second language in schools. Only in Javanese, however, is there any extensive literature, though it is a literature that is familiar throughout the islands. Its chief sources are the two Hindu epics, the *Mahabharata* and the *Ramayana*. This literature is the inspiration of Javanese drama, puppet shows, music and dance—in fact, of every form of Javanese entertainment except for motion pictures. These are produced in Java. The films, which combine beautiful scenic effects and impassioned acting with rather melodramatic plots, today rival the older entertainments in popularity everywhere in Indonesia.

The gifted Javanese are also responsible for the gamelan. It is an orchestra whose chief instrument is a series of gongs arranged in sets. Gamelan music has penetrated all the islands. At its best in Java, it is played there with sets of a dozen gongs of various sizes. Each set is hung

in a low wooden frame. To swell the sound, there are separate large gongs, which hang alone, and strips of bamboo. The strips furnish high tones. All these are played by striking them with drumsticks, while other musicians play flutes and two-stringed violins. At its least, a gamelan may be a few brass gongs resting across two horizontal strings, played by a Bornean man beside a campfire deep in the jungle.

The Javanese are not today gifted architects, for the arrival of Islam apparently discouraged temple building. But before this, in the eighth century A.D., under the influence of Buddhism, and in the ninth century to worship the Hindu deity Siva, they built many elaborate and impressive temples. We have already mentioned the famous Buddhist temple at Borobudur. Its exquisitely carved galleries and nine terraces are built in a semi-circle around a hilltop. The life story of Buddha is told in carvings, and images of



INDONESIAN CONSULATE

A FIELD IS PREPARED for planting with a primitive plow drawn by oxen.



INDONESIAN CONSULATE

»

BENDING OVER in the hot sun, women plant the tiny seedlings in the flooded paddy.

VAN BUCHER—PHOTO RESEARCHERS





VAN BUCHER—PHOTO RESEARCHERS

A VOLCANO looms over a ripening paddy in Bali. For all the horror of eruptions they keep the soil continuously and fabulously fertile.

Where rice is
the staff of life



VAN BUCHER—PHOTO RESEARCHERS

»
RICE GODDESS is represented by palm-leaf figures hung on high at a festival.



«

MEN AND WOMEN both flock to the fields when the grain is high and yellow-ripe, its kernels bursting, to harvest it.

USING WOODEN PESTLES in stone mortars, village women pound the grains to remove husks.



JULES BUCHER—PHOTO RESEARCHERS

Buddha fill hundreds of niches. As for Siva, in some cases his image may really represent a dead Indonesian king.

The Sundanese resemble the Javanese in most ways but are less gifted in artistic expression and more cheerful in temperament. The Madurese are tough and persistent with little artistic ability.

Borneo is the third largest island in the world. About three quarters of its area—Kalimantan—is part of the Indonesian Republic. Borneo is huge and compact

with a coast bearded in dense mangrove swamps. There are no good natural harbors in Kalimantan and its rivers are difficult to navigate. Nine tenths of the mountainous interior presents a jungle barrier of thick evergreen forests. The jungle has no railways or real roads and hardly even tracks. Malays and Chinese live along the coasts. Inland live a variety of aboriginal stocks, of which Dyaks, Muruts and Dusuns form the majority. The way of life of these interior peoples

THE HOST serves his guests at a *salamantan*, a party given to launch a new business.

STANDARD OIL CO. (N. J.)



is still extremely primitive, hardly out of the Stone Age. As their birth rate is declining, they may die out before new ways can penetrate to save them from total extinction.

Heavy rainfall regularly strips the soil from Borneo's backbone of mountains. Rivers of mud rush down to the sea and there dump their burden. If Bornean farmers could pursue submarine agriculture their success would be guaranteed, for Borneo's richest soil lies two feet under brackish water. One cannot blame the Bornean farmer for practicing the forestry nightmare of shifting cultivation. When one little patch of soil becomes worn out, he simply moves to another. Although Borneo doles out a near-starvation diet to its people, the island nevertheless has treasure buried in oozing black folds—oil.

Celebes, or Sulawesi

Celebes (Sulawesi) sprawls like a maimed octopus in the deep sea east of Borneo. The jagged Celebian mountain ranges run in every direction and often spill from great heights straight into the deep sea. Celebes has a dozen smoking volcanoes on the extreme northeastern tip of a mangled tentacle of land.

Though the land area is large, Celebes has few rivers. Even these are wasted in deep drops, in rapids that dash from gorge to gorge, and in falls that plunge directly into brackish swampy deltas. They are either in flood or bone-dry.

With its four lanky peninsulas thrust into deep seas and its coast buttressed by forbidding cliffs, the island seems to forbid approach. Even more perilous are its submerged offshore coral reefs, so placed as to frighten away even the most skillful mariner. The interior was never explored until early in this century.

Buginese and Macassarese live along the coasts of the southern peninsula. The island's most important port, Macassar, is there. Four centuries ago the Portuguese established the port as a stopping place on the way to the Moluccas, with no thought of it as an entry to Celebes or as an exit for Celebian products. It became both of

these under the Dutch as well as the capital of Celebes. It remains a distributing center for many products of the Moluccas and the Sunda islands.

The northern peninsula (Minhassa) is the home of the Minahassese, almost all of whom are Christians. They somewhat resemble Filipinos. The Minahassese are considered the most advanced group on the island. A rather primitive group, the Toradjas, dwells inland.

The Lesser Sundas

Of the Lesser Sundas, Bali, though small, is world famous for its beauty, both scenic and human. In the lee of its smoldering volcanoes lie sapphire lakes. Lush forests clothe the slopes. Bali's two live volcanoes are in the most favorable position to enrich the soil. Beginning several thousand feet high on the slopes, a long plain slopes gently southward to sea level. This plain is veined with streams that carry volcanic material from the upper levels. As the wet season wanes and the waterways dry up, they leave their rich silt spread out for miles.

The plain is elaborately terraced for rice cultivation. There is no more exquisitely beautiful man-made scene anywhere than the Bali terraces when the young rice shoots are turning pale green against the dark background of volcanic cones, while small opaque white clouds drift between the summits.

Art and religion in Bali

The Balinese have endearing personal charm and physical beauty, including superior physiques. They are famous for highly imaginative wood carvings and for ritualistic dances. Many of the dances are performed in a state of trance, self-induced with the aid of incense, and melodies sung by sympathetic onlookers to an ever increasing tempo. Temple dances are performed by small girls or by young boys. Their entire childhood is devoted to strict training for the dance, for which they will soon become too old.

In their practice of Hinduism the Balinese have shed much of its ancient austerity and borrowed from it religious



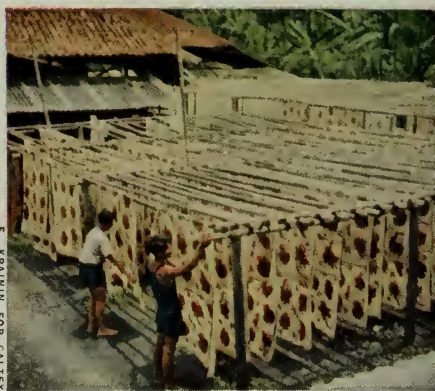
H. BRISTOL FOR CALTEX

A "CHRISTMAS TREE" RIG is adjusted to control the flow of oil from a Sumatra field.

DRYING ground cassava root, the poor man's substitute for rice.



JULES BUCHER—PHOTO RESEARCHERS



E. KRAVIN FOR CALTEX

BATIK FABRICS, fresh from the dyeing vats, are hung up to dry in the open.

TEA PICKERS carry their delicate burden from a hillside plantation.

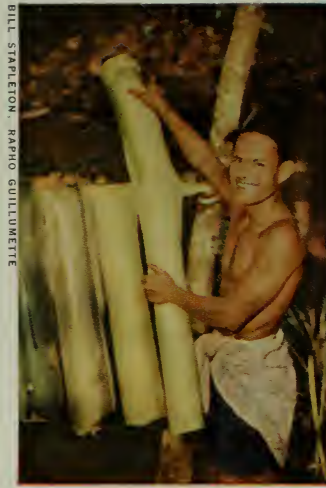


VAN BUCHER—PHOTO RESEARCHERS



HARRISON FORMAN

FISHERMEN OF SUMBA. Fish add needed protein food to island diet.



BILL STAPLETON - RAPHO GULLUMETTE

TOUGH and flexible, dried palm shoots have many uses.

Production for home use and export



MARC RIBOUD - MAGNUM

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LIQUID LATEX is gathered from a rubber tree. A cup is attached at end of the gash.

PANNING FOR DIAMONDS from the gem-bearing clay of a Kalimantan stream.

HARRISON FORMAN



authority for many earlier beliefs. Evil spirits, witches and sorcerers' spells are a greater threat to the peace of mind of the Balinese villager than are epidemics or atom bombs. They have adapted Hinduism to their own temperaments and to the natural lavishness of their island.

Lombok, Flores and Sumba

Just east of Bali is Lombok. Some Balinese live on Lombok along with a larger Muslim group called Sasaks. In scenery, Lombok is similar to Bali and has a magnificent active volcano more than 12,000 feet high. On Lombok the influence of Papuan (New Guinea) culture is evident.

Flores has ten active volcanoes but no plain. Its mountain streams plunge straight into the sea. Sandalwood and cinnamon trees are found there. Its best-known volcano, Keli Mutu, is unique for having in its crater, almost side by side, three brilliant lakes, each a different color: clear deep red, thick dark green, and crystal-clear emerald through which one can see to the bottom.

Tiny Sumba is well known for its fragrant sandalwood as well as the Sandalwood breeds of cattle and horses. The people of Sumba are of Malayan-Papuan stock.

Divided Timor

Timor is the largest island of the Lesser Sunda group. Only a third of it is in the Indonesian Republic. The rest belongs to Portugal. A backbone of mountain, which rises in parallel ridges, runs the length of Timor. Coral reefs are found almost a mile high and dry, left there by ocean tides long ages ago. Limestone plateaus stand out like white china platters, and geysers spout black mud. The people are a blend of many stocks.

Northeast of Timor lie the small island groups of Babar, Tanimbar and Kai. They are the beginning of a semicircle that curves around to the northwest with Ceram and Buru, two more of the Moluccas islands. This semicircle partly encloses the Banda Sea, one of the deepest of tropical seas.

The largest islands of the Moluccas group spread out between Celebes and New Guinea. Though all the Indonesian islands are sometimes called the Spice Islands, the name more properly belongs to the Moluccas. It dates from the sixteenth century when the Portuguese and Spaniards arrived. Such spices as pepper were then almost more precious than gold in Europe. There were few ways of preserving food, and spices were used lavishly to disguise its gamy taste. They were one of the chief lures that first drew Europeans to the Indies. The redolent cargoes of the ships returning to Europe fetched fabulous prices.

The Moluccas' modern importance

In any event the Moluccas have always been bustling centers of trade. Today they lie athwart the shortest sea and air routes between Australia, the Philippine Islands and Japan, and thus are a crossroads of heavy modern traffic.

Halmahera, northernmost of the Moluccas, is as oddly shaped as Celebes though on a smaller scale. Elevated coral terraces lie deep inland. Earthquakes are frequent. In fact, its western coast is a volcanic belt. Off that coast, tiny, round Ternate Isle consists almost entirely of a volcano that seldom rests. The chief town, also called Ternate, was once an important sultanate. Today it serves as an outpost for both Halmahera and New Guinea, shipping teak, ebony, spices and copra.

Buru, an egg-shaped island southwest of Halmahera, is the third largest of the Moluccas. Buru is largely mountainous. Coral reefs surround it. There is good timber in the interior, but lumbering is little developed yet.

Ceram, largest of the Moluccas, has a mountainous spine, from which streams tumble down in flood season. At other times they are dry gullies. Although the coasts are either low and swampy or high and steep, three usable bays indent them. This probably explains why Ceram has such a great mixture of peoples. Migrants from Java, Macassar and Ternate have settled around these harbors. Another



AN ICE MEANS BLISS to children the world over on a hot day. Water-

ice vendors trundle their cool wares in Indonesian villages as well as cities.

group, the Chinese, have spread all along the irregular coast. The Chinese are usually small tradesmen. Their little palm-shaded shops sell everything from betel nuts to tobacco and tins of soup.

Of the three Amboina Islands that lie close to the southeast tip of Ceram, Amboina itself is the largest. There two hilly peninsulas are linked by an isthmus of low land to form a long, narrow, well-sheltered harbor. Because of this protected anchorage the port town of Amboina is the commercial center and administrative heart of the whole group of the Moluccas.

Amboinese Christians

The population of the island is small, half Christian and half Muslim. Centuries ago Amboina responded to Portuguese Christian influence. Over the years the Amboinese Christians became such a separate group that in 1947 they sided with the Dutch against the new Indonesian Republic. Some migrated to Holland, but the chill climate proved as painful to them as political unrest. They have since returned to Amboina though discontent with the Government in Java still simmers among them.

In general, most of the coastal Moluccans are of Malay stock. The Moluccans of the island interiors, however, are loosely called *Alfur*, which means "in-lander," so completely has the original Moluccan vanished from the coast through intermixing. The *Alfur* are devotedly primitive in beliefs and practices. They worship and fear spirits and are true totemists. That is, each considers himself descended from certain plants and animals which, as he is not a cannibal, he must not eat or even look at for fear of giving offense to his ancestors.

The sago palm provides the staple diet of the *Alfur*. Sago pudding day after day is dull fare, though sometimes the Spice Islander makes it more palatable with a pinch of nutmeg from the *Myristica fragrans* tree, or a few cloves from Amboina, or a sprinkling of mace from Banda. He may add a generous dash of coconut oil made from the nut of the ever present palm in whose shade he naps.

The Indonesian Republic claims the western half of New Guinea, which it calls West Irian. This territory has remained a bone of contention between the Indonesians and the Dutch since the Republic was set up. The whole of New



IN THE MONKEY DANCE, or *ketjak*, of Bali, everyone joins in the fren-

zied performance. It is based on a legend from the Hindu epic *Rama-*

The high art of dance

HARRISON FORMAN



A STUDENT, in a sarong, performs some steps to the music of a gamelan.

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KEN HEYMAN, RAPHO GUILLUMETTE



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THE MASK of Rangda, the witch-queen of evil and death, in the *tjalona-rang*, a Balinese dance-drama.



HARRISON FORMAN

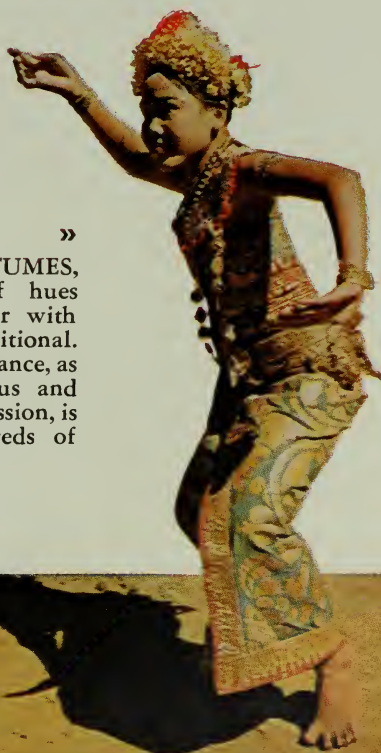
yana in which Rama leads an army of monkeys. It has religious meaning.

JEWELS and flowers are heaped to make a glowing headdress.



HARRISON FORMAN

»
RICH COSTUMES, rainbows of hues that shimmer with gold, are traditional. Indonesian dance, as both religious and artistic expression, is many hundreds of years old.



HARRISON FORMAN

Guinea is discussed in another chapter.

Only a few of Indonesia's islands have been named here. To understand the Republic and its problems, it is well to remember that each of the larger or more important islands has a cluster of many more—tiny atolls, barren reefs, rocky points, tufted hilltops, mangrove fringes, smoking cones.

Wallace's Line

There is a curious fact of nature about Indonesia. In Bali the eastern extent of Asian plants and animals ends. In Lombok, across the deep Lombok Strait, Australian ones begin. So clearly marked is the change here that naturalists speak of an imaginary line, Wallace's Line, through the strait.

In the hills of Sumatra such Asian mammals as tigers abound. Though they sometimes take human victims, they also check the menace of wild pigs, whose rooting destroys crops. Indian elephants appear in certain areas of Sumatra; and the one-horned rhinoceros is common as well as wild ox, deer, antelope and tapir. The orangutan, perhaps the most intelligent of the apes, is seen in the wild state only in the forests of Sumatra and Borneo. Graceful gibbons swing through Sumatran jungles. Agile monkeys chatter and scream in the treetops; and the timid little tarsier, which seems all eyes, clings to a limb. Birds and butterflies abound, vivid streaks of color.

Sounds in the night

The nights are alive with jungle noises. Multitudes of cicadas create a high-pitched whine like that of running machinery. Unseen geckos and chechaks (both little lizards) never tire of justifying their clacking names.

Snakes are prolific and often enter houses. Pythons may be three, four or five yards long. Hooded cobras flourish, also adders; and sea snakes prosper in the Indian Ocean off Sumatra's shores.

There are ants of all sorts and sizes, tiny scavengers that dispose of garbage. Termites often dispose of woodwork and houses too. Sandflies, mosquitoes, centi-

pedes and scorpions make unwelcome advances on human flesh.

Java is the home of many beautiful and some strange birds. Among them are peacocks and green jungle fowl, hornbills and honey birds. Sumatra and Borneo have argus pheasants and great helmeted hornbills, neither of which appear in Java.

Borneo jungles abound with elephants. However, they are offspring of elephants first put ashore in northern Borneo in an early day by the Sultan of Sulu. Forested areas in Borneo are alive with the call of the gibbon ape. It is a lovely lyrical cry that ranges from lament to exultation and the haunting ecstasy of free wild things. Wild pigs roam the jungle, crocodiles drift in the rivers, swiftlets fill caves with edible birds' nests, and there is fresh and salt water fish in plenty.

The animals and plants of Celebes, east of Wallace's Line, are more nearly like those of Australia. Bats, pouched opossums, and unusual Australian birds flourish. Celebes has a rare piglike animal called the babirusa. The male has four huge tusks that curve upward. It is found only in Celebes, Buru and Sula islands. Celebes also has a small jungle cow.

The Lesser Sunda islands and the Moluccas support few important land mammals. Bats, wild pigs, monkeys, deer, civet cats, opossums, cuscus and crested baboons are the most numerous. The Aru Islands off New Guinea have kangaroos.

The first Indonesians

Where did the islands' first human beings come from? Quite likely from Asia. When the first migrant, who dates before Stone Age man, prepared to move south he saw no water, only continuous upfolds of twisted earth and jutting layers of rock. He didn't try to climb over these obstacles. Instead, he traveled along their base. Thus he proceeded southeast until he came to a less tortured piece of earth to suit his simple living needs. There he settled, and in time other migrants came to join him.

Today, we believe that his first home was either on Sumatra or Java. The bones of a very primitive type of man have

been found on Java. This is the famous Java man or, to scientists, *Pithecanthropus erectus*.

What this original Indonesian was like we can only guess. Some scientists think he was dark-skinned with a broad flat nose and curly hair—an Australoid type. Others conjecture that he may have had woolly hair and have come of Negroid stock. Still another guess is that he had a narrow head and was moderately tall in stature, like the Papuan. Whatever he was, he has disappeared in the islands' melting pot.

We know more about later migrants. Broadly speaking, they came in two waves. The first wave consisted of people with shiny brown skins, narrow heads and

frizzy hair. The later wave consisted of people from eastern Asia with yellowish skins, broad skulls, straight hair and Mongoloid features. These migrants followed two routes, one south through Malaya, the other southeast through the Philippine Islands.

The Indonesian of today is the result of both waves. His skin may be anything from dark brown to creamy, though sepia is the most usual shade. Sepia skin, dark hair, dark brown, Oriental eyes, a rather flat nose, light bony framework, and moderate stature in both men and women, describes more Indonesians than not. The young women are frequently exquisite. They have an enchanting delicacy of form and move with rhythmic grace.

FARM WOMEN of the eastern end of the Indonesian archipelago. Their faces show traces of Pacific-island stocks, especially Melanesians.





VAN BUCHER—PHOTO RESEARCHERS

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FROM A TEMPLE
comes a procession of
women bearing baskets
of food. It has been of-
fered for blessing dur-
ing a Hindu festival.

KEN HEYMAN RAPHO GUILLUMETTE



CREMATION CEREMONY. The gaily decorated bull is a coffin in which the body is burned. Accord-
ing to Hindu belief, fire releases and purifies the soul.

VAN BUCHER—PHOTO RESEARCHERS





THE BUDDHA stands before a Chinese temple.



THE SILVER MOSQUE in Jogjakarta has a Middle Eastern style, unusual in Indonesia.

Muslims, Hindus and Buddhists

MUSLIM WOMEN of Indonesia wear white head coverings only for religious observances, as for prayers. They have never worn veils.

They have never worn veils.



Today in the larger cities most Indonesians wear Western clothes. Professional men and the prosperous wear Western dress as a mark of worldly sophistication or for convenience. Poorer Indonesians do so because it is cheap. Indonesian shops are flooded with Western clothes made in Japan and China—blue jeans, Aloha shirts, rayon blouses, cowboy belts. Though college girls frequently wear Western dress for convenience sake, their own Malayan costume is too beautiful, flattering and well-suited to the warm climate to be abandoned. Away from the cities one sees few men or women in Western clothing.

In Sumatra and Java feminine costume is at its loveliest. These are the wealthiest islands and even in Indonesia it costs to be well dressed. Java is to Indonesian styles what Paris is to Western fashions. Java is the soul and center of the world-famous industry that produces batik sarongs, and a sarong is the most essential article of an Indonesian woman's costume. The sa-



POPULATION DENSITY: black areas, about 155 persons per square mile; gray areas, 155 to 777; white areas, over 777.

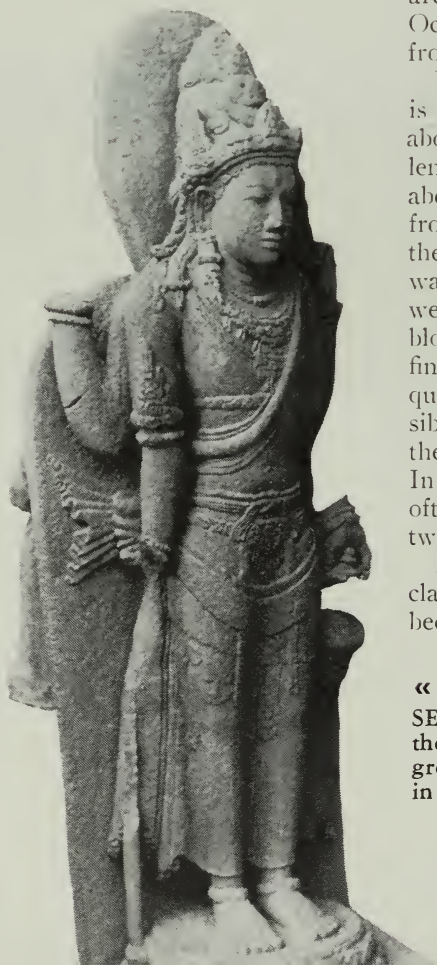
rong is a strip of material two to four yards long and wide enough to reach from the chest down to the ankles.

Batik is a painstaking hand method of dyeing. The design is applied in melted wax. When the cloth is dipped in dye, the waxed parts remain free of the dye color. Many of the batik designs are incredibly intricate and delicate. Patterns are usually traditional, some being limited to certain districts and even to families.

The real-life subjects of batik designs are flowers, foliage, birds and butterflies. Occasionally a grotesque puppet peers from a dark background.

Wrapping and draping a sarong properly is an art. First the woman raises it well above her waist, using its width as the length of her skirt. Then she wraps it about herself, pleating it just enough in front to allow room for walking. Finally, the sarong is cinched tightly about her waist by a belt. Fashionable city girls wear silk blouses above the sarong. The blouse may be of sheer white material with fine embroidery, or hibiscus pink or turquoise blue. In fact, any color is permissible provided it doesn't repeat a color in the sarong. That would be in poor taste. In the country the sarong is used more often as a single garment. It is then twisted high on the chest.

All through the islands the village girl clad in such a sarong goes shopping, or to bed or bathes in the river. By loosening



«

SERENITY IN STONE—one of the many statues that grace the great Buddhist temple Borobudur, in the center of Java.

the sarong and drawing it over her head, she also uses it as a tent for privacy.

The Indonesian woman also wears a long scarf. This should be of another color still and is usually printed with flowers. It may be of very delicate material and thus for ornament only, or it may be strong enough to tote the baby or to carry home the shopping. She never wears a hat. Her perfumed black hair, shining with oil, is made more redolent by the heavy, sweet scent of the milky white temple blossoms that she tucks in her knot. In the cities she wears dainty, pastel-colored toe slippers with slightly elevated heels, but at home or in the country she goes barefoot.

Men wear sarongs too though theirs are more subdued in design—two-color plaids or large checks. A man holds his sarong in place with a wide leather money belt. It reaches to his ankles unless he is running for a street car (in Java). Then he tucks it up about his waist and reveals his cotton shorts. In active work, as in the

fields, he discards the sarong completely and wears only shorts. His shirt is loose and hip length, fastened at the throat with ornamental buttons. In the city he is shod in Western shoes, or sandals that are loose at the heels. The soft shuffle of men's slippers and the sharp clack of women's heels are sounds as typical of Indonesian cities as is the more gentle patter of bare feet which is heard in country and kampong. An Indonesian man who keeps to tradition wears a large plaid cotton kerchief twisted into a formal cap. If he conforms to Muslim custom, he keeps it on his head indoors and out. The Malay *songkok*, a brimless black hat, is quite common today and is almost always worn with Western dress—lightweight suits or slacks and shirts.

The most important accessory of the village Indonesian man is seldom on display. This is his *kris*, a small, often exquisitely made dagger with a twisted blade. He wears it under his shirt at his belt. A *kris* may represent a small fortune. Not

MORNING SERVICES at a Christian church. There are three million

Christians in the Republic though most of the people are Muslims.





KEN HEYMAN, RAPHO GUILLEMETTE

VIVID YARNS and bolts of cloth, of cotton or silk, make a gay display in a Balinese village shop.

Local markets supply everyday needs

A FOLDED BANANA LEAF serves as a disposable container for a quick meal of rice.



VAN BUCHER PHOTO RESEARCHERS

SATAY—mouth-watering bits of broiled meat.



HARRISON FORMAN



HARRISON FORMAN

SHRIMPS, BANANAS and a variety of vegetables and meats are spread out to tempt the passer-by. From such ingredi-

ents a "rice table" may be prepared. This is a mound of rice topped off with cooked vegetables and lamb or chicken.

only do Indonesians value *kris* highly, they are enthusiastically sought after by non-Indonesian collectors. In searching for a prize *kris*, a visitor hears much of the modern history of Indonesia. Such weapons have often belonged to the most beloved and admired or berated and feared figures in island lore. The puppet characters of Javanese shadow drama may play roles straight from ancient Hindu epics. The real-life heroes of the island sagas, however, are pirates, corsairs, sea kings, smugglers, rebellious native princes, insurgent sultans, and leaders of revolution. The day of agricultural leaders, industrial chiefs, intellectuals and men of peace comes next.

Indonesian—his name (which means simply "islands") explains his problems. He is an island man with a yearning for continental unity. He is an artist, a craftsman, a dramatist in a world that glorifies mass production. Religiously, he is extremely devout. All his art, work and daily living are tied to his creed. He is born to an age that demands hard work, in a climate that discourages it. At the same time he is proud of having his own nation and jealous of its standing in the world. These motives are likely to prevail if Indonesia can catch up with the twentieth century, in industry, economics, education, and remain at peace.

BY AGNES NEWTON KEITH

INDONESIA: FACTS AND FIGURES

THE COUNTRY

A group of islands in the Malay Archipelago lying along the equator between the North Pacific and Indian oceans. Area (excluding Western New Guinea, or Irian, which is claimed by both Indonesia and the Netherlands), 583,600 sq. mi.; population, about 86,000,000.

Area and estimated population of principal islands or groups are: Indonesian Borneo (Kalimantan), 208,300 sq. mi., 4,000,000; Java and Madura, 51,032 sq. mi., pop., 54,000,000; Sumatra, 164,000 sq. mi., pop., 13,000,000; Riouw and Lingga archipelagos, 3,121 sq. mi., pop., 225,000; Bangka, 4,611 sq. mi., pop., 250,000; Billiton, 1,866 sq. mi., pop., 80,000; Celebes (Sulawesi), 73,000 sq. mi., pop., 6,000,000; Molucca Islands, 33,315 sq. mi., pop., 780,000; Nusa Tenggara (Bali, Lombok, Sumba, Flores, Sumbawa, Indonesian Timor), 25,520 sq. mi., pop., 5,000,000.

GOVERNMENT

Independent since 1949, a republic since 1950, Indonesia has a president, and a parliament which is elected for 4 years. There are a House of Representatives of 260 members (1 for 300,000 citizens) and a Constituent Assembly (elected in 1955 to redraft the provisional constitution) of 520 members (1 for 150,000).

COMMERCE AND INDUSTRIES

Agriculture constitutes the chief occupation but there is increasing industrial production. There are shipyards; assembly plants; textile, paper, glass, chemical and cement factories. The chief products are: sugar, rubber, coffee, tea, rice, corn, cassava, tobacco, pepper, copra, kapok and cinchona (from which quinine is obtained). Fisheries are of considerable impor-

tance, and fish is an important part of the Indonesian diet. Native industries include the preparation of agricultural and forest products for export, weaving, dyeing and metal work. Tin is mined in Bangka, Billiton, Riouw and Sumatra; coal in Borneo and Sumatra; petroleum found in Borneo, Sumatra and Java. Chief exports are rubber, oil, tin, tea and sugar. The monetary unit is the rupiah.

COMMUNICATIONS

National shipping company has fleet of 42 vessels; considerable interisland shipping; railway track, mostly on Java, about 4,000 mi.; roads, about 47,000 mi.; about 120,000 passenger cars, trucks and buses, 80,000 motorcycles; national airline and service by others; 80,000 telephones; 26 radio stations and almost 500,000 receivers.

RELIGION AND EDUCATION

Freedom of worship; majority of Indonesians, Muslims; some 3,000,000 Christians, 1,000,000 Buddhists (mostly Chinese); Balinese are Hindus. About 47,000 elementary and secondary schools; 5 universities; teacher-training colleges; other institutions of higher learning. About 60% of adults are literate.

CHIEF TOWNS

On Java: Jakarta (formerly Batavia), capital of Indonesia, 2,800,000; Surabaya (Soerabaja), 950,000; Bandung, 820,000; Jogjakarta (Djodjakarta), 500,000; Malang, 420,000; Solo (Surakarta), 350,000; Semarang, 340,000. On Sumatra: Medan, 520,000. On Celebes: Makassar, 270,000.



NORMAN SOONG. BLACK STAR

TWO SEA DYAK GIRLS combat the hot tropical sun with a cool dip in a river.

result of this upsurge in national prosperity was the erection of a magnificent mosque for Brunei's Muslims in the capital city. Its opening late in 1958 drew Muslim dignitaries from all over the world.

Borneo is a part of the Malay Archipelago and lies just north of Java in the South China Sea. Despite the recent flurry of modernization, it is still a land of primitive mystery. Large tracts of forest country on the island are unexplored and the native tribes that inhabit them are wild and dangerous. This is largely because Borneo is so hard to reach. The mainland is densely forested. Ferns, vines and exotic wikki flowers add to the denseness of a jungle nourished by tropic warmth and bounteous rainfall. In Sarawak, hemmed between the mountains and the sea in northwest Borneo, there are nearly two hundred inches of rainfall per year, most of it during the northwest monsoon which blows from October to March. Except for the coming and going of rain squalls, there is little climate variation on the island. On the coastal plains and swamps it is always hot; at Sarawak it ranges from 70° to 90° by day, though it is cooler at night.

Borneo's wildness resists taming and holds back development of its natural riches. Known resources lie untapped, and perhaps more await discovery. We know that in its forests there are valuable gutta-percha and rubber trees, coconut and sago palms, rattan canes and ironwood trees. Borneo is rich, too, in orchids and all kinds of tropical flowering plants. In various districts there are coal, oil, gold, diamonds and other less important minerals.

Of the original peoples who inhabited the island we know but little. When, centuries ago, Borneo was overrun by Malays, these native tribes were driven far inland. They still live in the heart of the deep forests—the Klemantans, Muruts, Kayans, Kenyahs and Punans—savages

Borneo ...untamed *natural resources*

SLOWLY but surely the modern world is at last coming to Borneo. Long regarded as one of the backwaters of the western Pacific world, this mammoth island, the third largest in the world, is beginning to attract the interest of foreign investors. Borneo's long-dormant timber and rubber industries have increased their outputs considerably. Brunei, the tiny, British-protected sultanate on the north coast, is making the most spectacular gains of all, thanks to the oil industry. Some observers even refer to Brunei as the "Cinderella state." Oil was discovered on its territory at Seria in 1929, and by 1960 the annual revenues from it had mounted to \$42,000,000. One



HOSE

A KLEMANTAN CHIEF, poised for battle, wears a war coat of the skin of a panther he has slain. His wooden shield, painted with tribal symbols, helps to ward off the spring of a cat, a tossed spear or the blows of an opponent's sword. Many such warriors have been coaxed out of the jungles to work in the mines and oil fields of the coastal settlements.



#087

AMONG THE KENYAHS, the warriors paint upon their shields conventional designs of human faces, then ornament these grotesque escutcheons with tufts of hair from the heads of their slaughtered enemies. Their chief weapons are the sword and spear. Under Western influence native warfare has, however, been reduced chiefly to the avenging of injuries.

whose principal weapon is the blow-pipe, whose chief occupations are hunting and fighting. A sixth and very numerous people of Borneo are the Ibans, or Sea Dayaks, or Dyaks, on the lower reaches of the main rivers of Sarawak, but also to be found in British North Borneo and the adjacent Indonesian territory. (This territory was controlled by the Dutch until 1949.)

Control of Borneo is divided between Britain and Indonesia, the Dutch having withdrawn after Indonesia was granted her independence. The Dutch established

trading posts as early as 1604, but gained little authority for more than two hundred years. The natives were difficult to control and pirates were numerous. It was extremely dangerous for a white man to venture far from the fortified towns.

The first white man who gained any influence over the natives was an Englishman, James Brooke, who had served the East India Company before he determined to put down piracy and civilize the inhabitants of Borneo. His resolve was due to a voyage to China during which his vessel made its way among islands marvelous



AVA HAMILTON

THE LANGUR, OR HANUMAN, MONKEY OF INDIA, BORNEO AND SUMATRA

Langurs, distinguished by their long tails, beetling black eyebrows and general grayish color, are native to Indonesia as well as to India where they are free to roam the cities unrestricted.



EWING GALLOWAY

BORNEO YOUNGSTERS ON RIVER RAFT "WATCH THE BIRDIE"

The somewhat surprising name of this river is the Sooengookween, a tributary of the Barito in southern Borneo. It flows past the town of Banjarmasin, a port of more than 65,000 people.



HOSE

THESE YOUNG IBANS of the Sea Dayak group of Bornean tribes wear a gala dress rich with ivory, shell and silver and gay with gold-embroidered scarlet. For a hot climate the boy's attire, which conceals none of his splendid muscular development, would seem the more appropriate, though even his sword and turban are elaborate with trophies of the chase.



ROSE

THIS DAYAK GIRL wears a corselet of rattan hoops covered with brass rings, above a skirt fringed with coins, to match those around her chest. Her shell necklaces are heavy with silver, as are her belt and bracelets, while the rings in her ears conceal little bells. Her comb is decorated with silver filigree and tinsel. No wonder she looks weighted down!

for their scenery but inhabited by savage tribes who were the scourge of the South Seas. Eventually the young man equipped a large yacht and trained a picked crew of twenty for the adventure of civilizing the wild men of Borneo and others equally barbarous. When he started, in 1838, he was but thirty-six years of age; but he was made of heroic stuff.

When he landed at Sarawak in 1839 he found several Dayak tribes, ferocious head-hunters, in revolt against the ruling Sultan. The Sultan's uncle, Rajah Muda Hassim, accepted Brooke's proffered aid; and the Englishman, with his small crew and some Javanese who had joined them, fought a winning battle. In view of this service the Rajah insisted upon abdicating in Brooke's favor, though the Sultan did not confirm the title till two years later.

Rajah Brooke and the Pirates

Brooke now determined to suppress piracy for the sake of developing the commerce of the archipelago; and to this end he first attempted negotiations with the chiefs of the most warlike tribes, but to no avail. He then made successive expeditions against the Dayaks, Malays and Arabs who had been making the most ferocious raids upon white traders, in the course of which large numbers of the pirates were slain. On his return to London in 1847 he received high honors and was made consul-general to Borneo. The name of Sir James (Rajah) Brooke became world famous. For over a generation he ruled wisely, suppressed most of the head-hunting in British Borneo and persuaded large numbers of Dayaks to take up agriculture.

Now the Chinese who had been working in the alluvial gold deposits in Upper Sarawak sacked Kuching in 1867, burned Brooke's house, and would have taken his life but that his nephew raised a force of the Malays and Dayaks of the district and suppressed the insurgency. This nephew succeeded Sir James in 1868 and the office of rajah became hereditary in their family. North Borneo is now governed like a crown colony as an independent State under the protection of Great Britain.

Plantations and Lumbering

Besides Sarawak, British Borneo (which became a protectorate in 1881, and which consists mainly of Mohammedan Malays, with a sprinkling of white men and Chinese) includes Brunei and North Borneo. All have huge coffee, coconut and tobacco plantations and important lumber companies.

Brunei is a tiny Mohammedan state and there are very few Europeans. The chief town, Brunei, is so subject to the rise and fall of the water level that the British Resident who conducts the administration had his house built upon piles at the end of the river, while the jungle-clad hills rise up about the town. The old native quarter is, indeed, built entirely over the river and some of the dwellings actually float upon the water. The market venders, usually women in wide straw hats, array their stalls with many brass and silver articles to tempt the purse of the traveler, and with cotton cloth and foodstuffs, each in a little boat anchored to the pile dwellings, and to these the purchasers make their way in other boats under a bombardment of native vociferation. The scene presents mingled odors of fresh-caught fish, rotting piles, and over-hot humanity, while toward evening a million frogs play bass in a symphony of bird and insect sounds—and mosquitoes and sometimes ants puncture one with fiery thrusts and from the nearest jungle one may sometimes hear the cries of a band of monkeys.

As to British North Borneo, it has a coastline of over nine hundred miles and in Sandakan, on the east coast, the one fine natural harbor of the island. At this point Borneo lies so near the Philippines that ships can make the crossing in less than a day. The tourists will find good hotel accommodations at Sandakan, with such touches of Western civilization as an automatic telephone service, a scientific society and a racing association.

Sultan Wore Huge Diamonds

The portion of the island formerly called Dutch Borneo is now Indonesian



BLACK STAR

TRADE CENTER IN WEST BORNEO

Natives discharge their wares in Pontianak, capital of the state of West Borneo, which is now part of the Republic of Indonesia. The city is the center of Chinese and native trade, and many of the boats have been en route for days and weeks before reaching Pontianak. Resident Chinese dealers buy from the native producers. The chief commodities are rubber and copra.

Borneo or Kalimantan. It is a part of the Republic of Indonesia. On the whole, it is very much less developed than British Borneo, partly because of the sparsity of its population which is confined to settlements along the rivers. It is under the jurisdiction of a governor who is appointed by and is responsible to the central Indonesian Government.

At one time, during Dutch administration, this part of Borneo was under a Sultan. The Sultan had a palace lighted by electricity and protected from the rains by a galvanized iron roof, which was his great pride. He wore incredibly large diamonds as part of his attire and kept fighting cocks. In those days the Sultan's subjects were addicted to piracy and head-hunting, and they are still somewhat wild. Today, however, there are Arabs and Chinese in the mines and fisheries and on the plantations. The Chinese conduct trade with their own country. Indonesian Borneo contains a wealth of minerals. There are big oil fields at Balikpapan, and new wells are continually being brought in. There are diamond fields, of which probably the richest lies at Martapura, and the timber (ironwood) and rubber industries are of considerable consequence because of the value of their products. In Martapura and several other districts of the southeastern division there is ship-building, iron-forging, diamond-polishing, gold and silver-smithery.

Borneo's location naturally directs her trade to China and Australia and to the Philippines. One expects her trading vessels to go forth laden with ironwood and rattan, rice, tobacco and spices, hemp, gums and resins. It is more surprising to find in their holds the gelatinous birds' nests found and collected in the vast sea caves of coastal regions, a Chinese delicacy, and *bêche-de-mer*, for the making of Chinese soup. There are also armadillo skins, seed pearls, gambier—a substance used in tanning and dyeing—camphor, and mineral oil from a rich field at Miri.

Need Roads and Railroads

One drawback to development in Borneo is the lack of good roads and rail-

roads, though there are bridle paths and native trails. River boats connect the villages and coasting steamers ply from port to port.

Warring Tribes of the Interior

For the most part, as we have indicated, the dominant native population is Malay. More interesting as a matter of study are the savage races of the interior. Most of these tribes live in communities ruled by chiefs, but numbers of them wander about in the jungle, living on wild fruits and the flesh of wild animals. Being of different races and speaking languages that are unintelligible outside their own districts, they are constantly making warfare upon their neighbors. There is a good deal of sickness among the natives, due chiefly to lack of cleanliness about their persons and the food they consume.

In such a country as Borneo, with its thousands of miles of forest and jungle, the people of the interior are mainly dependent for their living upon the wild creatures found there, though sago is cultivated in some places, just as rice is widely grown in the more civilized districts. Fortunately for the aborigines, deer, wild pigs, wild cattle and other animals are plentiful. These are snared in traps or are brought down by a poisoned dart.

The Hairy "Man of the Woods"

Monkeys, which are numerous, are killed and eaten; and here reference must be made to Borneo's distinctive wild animal—the orang-utan. This great ape, whose name means literally "man of the woods," grows to a height of over four feet; its hair is reddish in color; and the extraordinary length of its arms enables it to travel at an extraordinary pace by swinging itself from tree to tree. Elephants also are found, but only in North Borneo. The tarsier, a mouselike creature that lives on insects, but is really a primate, and thus belongs to the same order as do the apes, is also a native of Borneo. It lives in trees and is most active at night.

There are tapirs and ant-eaters, a monitor lizard, pythons and cobras. There are



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NOT THE FAMILY WASHING, BUT FISH DRYING IN THE SUN

Just outside Kuching, capital of Sarawak, is a thriving community of Chinese fishermen who make their home there. After curing and drying their catch, they sell it in the Kuching market.

minas, birds that can be taught to speak. The honey-bear, by which is meant the little Malay bear, a lover of the stores of the wild bee of the jungle, is common in this land of queer creatures. There is also a mouse-deer or plandok, a dainty creature no longer than a rabbit and not nearly so heavy. A tender morsel for anyone or anything that can catch it, it goes leaping soundlessly through the brush, its big eyes seemingly round with fright.

Flying-frogs and "Pepper Ants"

At twilight the flying-foxes play by launching themselves parachute-like from the branches to the ground. There are even flying-frogs in the swamp lands. Less attractive wild swine, many with hornlike tusks, trot about in gluttonous herds, their little black eyes savage with hatred of the intruder. There are so-called Borneo ponies in British North Borneo; and if one is to enumerate several other living creatures that play a prominent rôle on this extraordinary island, one must name the fire ants and "pepper ants" with their painful bite, the sand-flies, the wood-leeches and in the marshes, the horse-leeches. The coastal waters are full of sharks. Scientists judge from the presence of a number of these species of animal life that the island may once have been connected with the continent of Asia.

Spiked Fruit and Pitcher Plants

Among other hazards of life in the jungle might be mentioned the durian, a large fruit covered with stout pyramidal spikes. When such an object falls from the top of a tall tree it really injures people. Its flesh is prized by the natives, though white men are appalled by its odor. Another strange thing found in Borneo is the pitcher plant, some of which are large enough to hold a quart of rain water.

Among the many interesting things to be seen in Borneo are the "long-houses," the wooden buildings in which communities generally dwell together. All the native tribes, with one exception, build these long-houses. The Punans, who wander

from spot to spot, but usually inhabit the densest part of the jungle, do not lead any kind of village life. When some of them have been induced to settle, they have only been able to construct the rudest of houses, a poor imitation of those of their neighbors.

The long-houses of the various tribes differ only in size, in certain details of construction and in their decoration. One such house may be set up to accommodate fifty people; others will hold as many as three, and even five hundred. A long-house is built of wood and may be as much as four hundred yards in length with a long gallery, which serves as the village street, running along the front. The structure is divided into a number of rooms in which separate families lodge.

In a Kayan "Long-house"

If we were to peep into one of the rooms we should see that it was about twenty-five feet wide, that it contained several alcoves or sleeping-places screened off at the sides, and that in the centre of the mat-covered floor was a rough fireplace made of a slab of clay in a wooden frame. For ventilation and light, a trapdoor, opened and closed at will, is fixed in the roof.

In addition to the family fireplaces, the tenants of a long-house have access to other fires that are kindled at intervals along the outer gallery. Some of these are kept continually alight. Over one of these communal fireplaces—usually the one near the chief's quarters—is to be seen a row of dried human heads, together with various charms and war trophies.

All such native dwelling-houses are built along, or near, the water. This is because rivers are the great highways of Borneo. There are no roads except in those coastal settlements where towns have sprung up, and there are not even beaten tracks of any importance through the jungle. The long-houses are built upon piles because they thus offer better protection against marauding head-hunters; but the piles must be tall ones, for were the house not raised high from

the ground, the sleeping inmates might be speared through the floor from below.

Of the native peoples mentioned the Sea Dyaks, or Ibans, are the best known. This is mainly because they are numerous in Sarawak. Stouter in build than his land brothers, the Sea Dyak has well proportioned limbs, his figure is neat and almost boyish, and he walks with an air that stamps him a resolute fellow.

The Sea Dyak is lively in disposition, often boastful and excitable and always talkative and cheerful. His chief characteristic, however, is restlessness. The darker side of the picture presents him as quarrelsome and treacherous, with little liking for discipline.

The Kayans, who are found throughout central Borneo, are a warlike people but they are less quarrelsome than the Dyaks. They excel above all things in various handicrafts. They are skilled in smelting iron and in the manufacture of swords. The Kayans are probably the best boatbuilders on the island, and their decorative work is striking.

The Punans are the most primitive of all the tribes. They roam the forests in bands, supporting themselves as they travel on wild sago and other natural products, and by shooting game with their blowpipes. For most manufactured articles, however, such as swords, spears and cloth, they are dependent upon others.

BORNEO: FACTS AND FIGURES

GOVERNMENT

Great island in the Malay Archipelago. Bounded on north and northwest by South China Sea, northeast by Sulu Sea, east by Celebes Sea and Macassar Strait, south by Java Sea, and southwest by Karimata Strait. Area, 286,916 sq. mi.; estimated population, 4,850,000. Politically Borneo is divided into (1) North Borneo, (2) Brunei, (3) Sarawak and (4) Indonesian Borneo.

NORTH BORNEO

Occupies extreme northeast section of the island. Area, 29,500 sq. mi.; population (est.), 420,000, chiefly Muslim settlers on the coast and aboriginal tribes in the interior. Administered by a governor, assisted by a 9-member Executive Council and a 22-member Legislative Council. Products: timber, rice, coconuts, gums, coffee, gutta-percha, rubber, tobacco, coal. Exports: rubber, camphor, timber, spices, birds' nests, seed pearls, sago, coffee. Monetary unit of all 3 areas of British Borneo, the Malayan dollar. Railways, 116 mi.; roads, 725 mi.; telegraph, radio and telephones. Protestant and Catholic missions. Schools, about 335. Jesselton (capital), population, 11,700.

BRUNEI

Malayan Sultanate on northwest coast of island under British protection. 1959 constitution gave the sultan executive power. A British High Commissioner will have advisory and administrative functions. Area, 2,226 sq. mi.; population, about 75,000, chiefly natives. Native industries: boatbuilding, cloth weaving, brass foundries; chief products: mangrove extract, rubber, sago and timber. Imports: rice, tobacco, piece goods. There are 4 radio sta-

tions; 65 schools. Social benefits for all over 60. Brunei (capital), population, 16,000.

SARAWAK

A British crown colony on northwest coast of Borneo. Area, 47,071 sq. mi. with 450 mi. of coast line; estimated population, 635,000. Under British protection; chief administrator a British governor. Products: sago, pepper, gold, rubber, gutta-jelutong, gutta-percha, cutch, crude oil and rattans. There are no railroads; 560 mi. of roads; rivers used for internal transportation; 36 post offices; radio stations; local government telephone system. Protestant and Catholic missions. Over 790 schools. Kuching (capital), population, about 55,000.

INDONESIAN BORNEO (KALIMANTAN)

Central and southern section of the island, comprising nearly three fourths the entire area. Two divisions: Western District, area, 56,664 sq. mi.; population about 1,125,000; Southern and Eastern District, area, 151,621 sq. mi.; population, 2,000,000. Kalimantan is a province of the Republic of Indonesia and has a governor who is responsible to the central Government in Jakarta, by which he is appointed. (See Indonesia, page 256.) Chief occupations: mining, fishing, agriculture, spinning, weaving and dyeing, manufacture of iron implements, gold- and diamond-polishing. Chief products: copra, petroleum, antimony, gold, diamonds, iron, mineral oils, timber, rice, pepper, tobacco, spices and coffee. The monetary unit is the rupiah. There are telephone, telegraph and radio communication. Full religious liberty. Majority of natives Muslims. Protestant and Catholic missions. Government primary and secondary schools for all classes; normal and technical schools. Banjarmasin (chief center), population, about 80,000.

New Guinea

*... the world's largest
tropical island*

AS untamed as it is beautiful, New Guinea still defies man. Its climate and coastal waters are even more treacherous than those of Borneo; for centuries they kept New Guinea isolated from the outside world. Some of its inland tribes are so primitive that they still use stone axes. Nonetheless, today not even New Guinea is aloof from the international turmoil.

Two countries govern the island—the Netherlands and Australia. Dutch control of the island's western half is violently disputed by Indonesia. Indonesian President Sukarno once declared that if the UN did not order the Dutch out of New Guinea, his country would "adopt a new course which may startle the whole world." The Dutch, determined to keep a foothold in Asia, however, have refused to budge. The Australians, too, have a strong political stake in the island. They consider it a vital link in their defense, since New Guinea is the last of the stepping stones leading from Asia to Australia. The Australians administer the northeastern portion of the island, the Territory of New Guinea, as a UN Trust Territory, and govern the southeastern portion, Papua, as a colony. They have steadfastly opposed Indonesia's claim to Dutch New Guinea.

The Indonesia-Netherlands dispute stems in part from Indonesia's long tenure as a Dutch colony. Considerable ill feeling still exists among the islanders against their old rulers. Indonesian nationalists claim that their country is heir to all former Dutch possessions in southeast Asia. They charge, too, that a majority of the natives in Netherlands New Guinea, if given the chance, would express a preference for Indonesian control.

The Dutch reply that the natives have no cultural ties with the Indonesians and are scarcely able to express themselves at all, much less participate intelligently in a referendum. The Dutch promise, however, to let the islanders decide their own fate at some time in the future. In 1957, the Netherlands and Australia issued a joint statement promising to co-operate in administering the "geographically and ethnologically related" areas of the island and to promote "self-determination" for the population.

Perhaps the strongest point in favor of the Dutch, though, is one rarely voiced: their superior administrative ability. Though long neglected by The Hague, New Guinea, one of the last remnants of the Dutch overseas empire, is today receiving considerable attention. Experienced colonial administrators, technicians, school teachers and other experts are flooding the island. Roughly \$25,000,000 is being spent annually on public works. The oil fields in the Vogelkop Peninsula, in the process of development by Dutch enterprise, may one day yield considerable local revenue.

It is still possible, of course, that some sort of agreement between Indonesia and the Netherlands will be reached. The Dutch have stated their willingness to give up sovereignty to a Netherlands-Indonesian union. World opinion may weigh against the Netherlands. The Russian and Afro-Asian blocs have already sided with Indonesia several times in UN debates.

Australia, like the Netherlands, has been trying to build up its half of the island economically. The Trust Territory has benefited most, in part because of its superior soil, mineral wealth and relatively dense population. The Australians have also been able to build on the foundations laid by the former British administration. Coconuts are the main crop and mainstay of the economy. Gold mining is also quite important. Papua's economic progress has been much slower, largely due to a labor shortage. Rubber is the most important crop. Most of it is grown on 27,000 acres of plantations grouped



UNITED NATIONS

A PHYSICS EXPERIMENT holds the attention of young islanders at Rabaul Technical Training School, in the Australian area.

around Kanosia and Sogeria, within easy reach of Port Moresby, shipping center.

As one approaches New Guinea from the sea, its mountainous mass looms dark against sunlit waters. The volcanic ranges seem to rise straight up out of a tangled mat of trees, shrubs and vines. Some of the soaring black peaks are well over 13,000 feet above sea level. On the highest summits, no more than 350 miles from the equator, snow fields glimmer. The great spine that runs the length of the island is made up of the Nassau and Orange ranges, on the west, and the Bismarck Mountains and Owen Stanley Range, on the east. Within the Nassau Range is Mount Carstensz (16,400 feet), the highest island peak in the world. On either side of the rugged backbone, but

especially in the center, are vast lowlands drained by swift, torrential rivers. Though they are treacherous, small craft can ply them for some distance inland. Steam launches go up the Fly River, in the southeast, for 500 miles, and up the Sepik, in the northeast, for 300 miles.

New Guinea has two seasons. From October to April, monsoons from the northwest drench the lowlands with rain. Heavy clouds hide the sun, and the land swelters in an oppressive humidity. During the other months of the year, trade winds blowing from the southeast bring fairly dry weather. Temperature, however, varies not with the season but with the time of day and the altitude. At sea level it ranges from about 70° to 95° F. The highlands, above three thousand feet, are cooler and also drier.

Many parts of the coast are fringed with swamps, where the prop roots of mangroves mesh into impenetrable thick-

ets. Elsewhere there are coconut groves and stretches of grassland with an occasional eucalyptus tree. You cannot travel very far inland, however, without entering the rain forest. In its gloomy depths the glossy leaves of rhododendrons shine wetly, exotic orchids seem to float on the air, giant ferns spread their lacy fronds and palms lift their spiky crowns toward the light. Farther up the mountain slopes are alpine plants, including such trees as pine and cedar. The valuable hardwoods—sandalwood, ebony—are widely scattered.

The jungle is alive with creatures that fly and crawl and creep: plumed birds of paradise, cockatoos, vivid parrots, ostrich-like cassowaries, ibis, herons, doves; mosquitoes and exquisite butterflies; spiders, scorpions and mites. Crocodiles lurk in the streams, and there are lizards, pythons and poisonous snakes. Most of the few mammals are marsupials—pouched animals such as are found in Australia—kangaroos, wallabies and bandicoots. Near coral reefs the coastal waters swarm with marine animals: fish, oysters, turtles, dolphins, dugongs, crabs, crayfish and the curious sea cucumbers, or trepangs.

Human beings have been making homes in New Guinea for perhaps 25,000 years, though it seems that they all first journeyed there from other places. Some traces have been found of a very early group, possibly related to the Australian aborigines. Torres Strait, between Australia's most northern point and New Guinea's south-central coast, is shallow and only eighty miles wide. The next people to arrive were Negritos—short, energetic and Negroid in appearance. Today they are found mostly in isolated valleys. Then came waves of Papuans and Melanesians, whose descendants live along the coasts as well as in some valleys and on the lower slopes of mountains. The Papuans are rather dark, with fuzzy hair; the true Melanesians—"mop-heads"—are taller, have finer features and may be quite light-skinned. Still later, in several stages, Polynesians—light-skinned and straight-haired—passed through on their way to the central Pa-

cific. Last, before the first Europeans arrived, Malays, from Asia, came to western New Guinea.

None of these groups is completely distinct today. Actually the population is an extraordinary mixture, speaking a babble of tongues. No oceanic people had a written language, and family lines can be unraveled for only a few generations back. Around the Sepik Valley, in the north, is a dark-skinned, hook-nosed group. In one remote interior region there are some families who look very much like blond white people and, within a few hundred miles, queer jungle wanderers, the Kukukukus, under four feet tall. On Manus, in the nearby Admiralty Islands, lives a Mongoloid-looking people.

The first European to sight New Guinea, in 1512, was a Portuguese sea captain, Antonio d'Abreu. Another Portuguese navigator, Jorge de Meneses, visited the island in 1526-27 and named it *Os Papuas*, *papuas* meaning "frizzle-haired." In 1546, Ynigo Ortiz de Retez, a Spaniard, sailed part way along the coast. Fancying that it resembled the Guinea coast of West Africa, he gave the island its present name. It was not until 1767, however, that New Guinea was proved to be an island and not part of a southern continent.

Though a few other explorers touched at New Guinea from time to time, the unhealthy climate, the difficult terrain and the reputation of the natives for savagery left it isolated for many years after discovery. Early in the nineteenth century, however, European nations began to vie with each other in laying claim to undeveloped territories. So it was that the Dutch laid claim to the western half of New Guinea. Germany took possession of the northeast quarter, and Great Britain declared the southeast quarter a British protectorate, which was eventually transferred to Australia. Today all of the eastern half is under Australia.

Some of the most fierce fighting of World War II raged on and around New Guinea, including the Battle of the Coral Sea. Coastal villages were transformed first to serve the Japanese and then the

Allies. For the islanders the war provided an awesome glimpse of the might of the machine age. Since then a handful of New Guinea natives has been trying to bring twentieth-century enterprise to the island. Most of them, however, continue to live in the ways of their forefathers and are hardly out of the Stone Age. Among some of the villages perched high on the mountains or by streams in hidden valleys, cannibalism and head-hunting may still be practiced.

Though coastal people may work for Europeans on plantations, the majority are subsistence farmers. On trim little garden plots they raise only enough food, chiefly yams, for their own needs and add to their diet by fishing or hunting wild pigs and small game. Usually the stockaded villages are self-contained and hostile to outsiders. For trading purposes the universal language is pidgin English. Pidgin is not slipshod English but has a

special grammar and vocabulary with words drawn from Malay, native tongues, Portuguese, Dutch and German as well as English. There are some government schools, but for the most part missions supply what formal education the islanders receive.

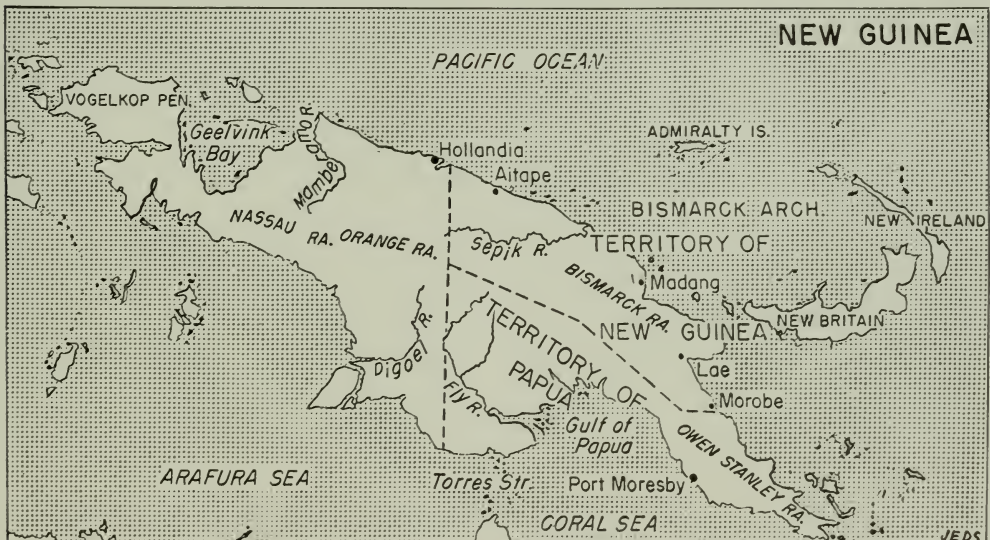
The houses are almost always built on piles. In some places there are immense communal houses, sheltering a number of families, as much as 50 or 60 feet high and 600 to 700 feet long, thatched with palm and divided into compartments.

The islanders are adept at wood carving and pottery and build excellent canoes. The larger boats, lakatois, are made of several dugouts lashed side by side, and their over-all width may be more than twenty feet. They are decked over and fitted with large, decorative sails. Fond of music, the people fashion flutes, drums, reed pipes. Bows and arrows and bamboo knives are their chief weapons.

NEW GUINEA: FACTS AND FIGURES

Bounded north and east by the Pacific Ocean, on the south by the Coral and Arafura seas, and on the west by the islands of Indonesia. The western half, including such offshore islands as the Schouten group, is Dutch New Guinea (Iriania)—claim disputed by Indonesia—area, 159,375 sq. mi.; population, about 350,000; capital, Hollandia. The northeast quarter, including the Bismarck Archipelago and the northernmost Solomons (Buka and Bougainville), is the Territory of New Guinea, a UN trusteeship governed by Australia, area, 93,000 sq. mi.; population, about 1,080,000. And the southeast

quarter, including the Louisiade Archipelago and the Trobriand, Woodlark and D'Entrecasteaux groups, is the Territory of Papua, under Australia, area, 90,540 sq. mi.; population, about 370,000. Port Moresby is the capital of both the territories of New Guinea and Papua. Coconuts, chief commercial crop; some rubber, coffee and cacao plantations. Island has copper, silver, lead, zinc, osmium, graphite, coal and oil but only gold produced in any quantity. Chief exports, copra and gold. No railroads and few good highways; transportation mostly by air and water.



The Pacific Islands

*... steppingstones
in the tropical seas*

JET planes and ocean liners are fast becoming familiar sights among the islands of the South Seas, once visited only by trading schooners. The schooners, some decrepit and some sleekly modern, still ply the warm seas. Today, however, it is the big ships and swift planes, carrying tourists, that receive the most lavish welcome. Flower-bedecked dancers, drummers and guitar players meet the visitors, who are soon likewise adorned with sweet-smelling *leis*. It is fun for the tourists and good business for the islanders. Most of the islanders are naturally hospitable anyway, and ship arrivals serve as an excellent excuse for feasting and merrymaking.

The surge in vacation travel of recent years seems likely to affect the islands as no other influence has in their history. As long as they stayed remote and isolated their small size and exceedingly slim resources held them apart from the mainstream of current history, except for a brief time during World War II. Today, however, as more and more people have the money and fast transportation gives them the time to travel long distances, the South Sea is opening up as never before. (Not all the islands are actually south of the equator; some are in the North Pacific Ocean. All those referred to as South Sea islands do, however, lie within the tropics.) The great assets of many of these tiny bits of land—natural beauty, balmy climate—may at last bring their inhabitants increased income, and hence a higher standard of living, to an extent undreamed-of before.

At present one of their greatest charms for visitors is that they are still relatively unspoiled, even primitive. But they run



the risk of losing this charm in the effort to provide the modern facilities, such as large air-conditioned hotels, that many tourists demand. Waikiki Beach, in Hawaii, is an example of what can happen. The jade and sapphire waters, the coral reefs, the waving palm trees, the cooling trade winds are still there but otherwise the famous strip today is hardly different from any other overcrowded seaside resort anywhere in the world. In 1959 Tahiti, the most legendary of all the South Sea islands, was still somewhat ramshackle, easygoing, with only the most casual accommodations for visitors. By 1961 it was scheduled to have an airstrip capable of handling jets. Meanwhile, plans were going forward for the erection of modern hotels and the like at Papeete. American Samoa and Fiji were likewise getting jet airstrips. Fiji, in fact, lies



CAMERA PRESS, PIX

HAZARDS of coconut cultivation; a Fiji grove damaged by a hurricane.

astride the main north-south Pacific air route. All this requires businesslike organization, to which romantic atmosphere inevitably plays a poor second.

Modern transportation and communications may also hasten the trend toward self-government, which thus far has only rippled the South Seas. Since the end of World War II, Western Samoa, under New Zealand administration, has slowly been groomed for independence. It acquired its own prime minister and cabinet after the 1960 elections and the chances were good that it would achieve full control of its affairs by mid-1961. American Samoa moved in the same direction. In 1960 the islanders adopted their first constitution (besides a flag). It provides for a Samoan legislature which enacts the laws and governs the islands. Previously a governor, appointed by the United

States, had administered these islands.

The Tonga Islands, a native kingdom, signed a new treaty of friendship with Great Britain in 1958. Though they remain under British protection, self-government has been increased. Great Britain still oversees foreign relations but Tonga can now make its own trading arrangements.

The idea of UN trusteeship is to prepare such areas for eventual self-government. This, of course, applies to the Pacific trust area under the United States—most of Micronesia. It is governed from Guam (an outright United States possession) but the various groups are steadily gaining more self-government on the local level. There the United States is also helping to improve the economy: introducing better fishing methods, teaching the value of crop variety, promoting coconuts as an additional cash crop. Illiteracy is also being attacked. In a recent year 91 per cent of the children aged eight to fourteen were attending school. On a beautiful campus on Ponape, in the Carolines, the Pacific Islands Central School trains Micronesian students to take over the work of administration.

The South Pacific Commission wars against malnutrition and disease. An international body, established in 1947, its members are Australia, France, Great Britain, the Netherlands, New Zealand and the United States. Headquarters are at Nouméa, on New Caledonia.

Yet the islands of the tropical Pacific *are* beautiful and often romantic. Idyls of the South Seas have formed an enduring part of the folklore of the Western world since the discovery of the islands in the seventeenth and eighteenth centuries. These tales and descriptions are by no means all fantasy. There is a magical beauty to the coconut palms leaning out from a backdrop of lush green, over a white coral beach and the luminously blue water of a lagoon—a beauty whose reality is more compelling than pictures

can show or imagination can paint. Add to the lagoon an outrigger canoe of no great size whose crew have sailed it over hundreds of miles of open ocean just to visit relatives on this island, and the picture takes on an epic quality. But then we must also add a small army of flies and mosquitoes which attack us with determination as we watch. These insects also will probably bring the natives on the outrigger to their deaths from illness more surely than the perils they face from storm and calm at sea. Nor are insects the only problem with which the islanders have to contend. While we may dream of the rich beauty of their home, they are likely to be dreaming of the luxury and excitement of ours.

Much of the charm of the islands for a Westerner derives from their small size. Although the long, irregular line of alternating coral reef and sandy islands of an atoll may enclose a great lagoon, outside of Melanesia a single island fifty miles long is very big in this ocean. Many densely populated islands are only a mile or even less than that in their longest dimension.

These little bits of solid footing which appear so suprisingly in the thousands of miles of constantly moving ocean are divided into high and low islands. All the larger ones are high islands. The distinction rests on the type of rock and soil of which they are formed. Low islands are all coral and coral sand. Some plants will grow directly in the sand. Those food crops that require richer soil subsist in spots where the products of the gradual decay of plant and animal life have mixed with the sand, enriching it and breaking down the grains through acid chemical action.

Fresh water comes from the rains which usually fall often enough to avoid a crisis. The rain water sinks into the porous sand and, being lighter, floats on the salty ocean water which seeps in below. Surprisingly little mixture takes place. It is only in time of drought that the fresh-water "lens" becomes thin enough to make the shallow wells unpleasantly brackish.

In addition, those islanders fortunate enough to obtain steel fuel drums use them to collect rain water off the corrugated iron roofs, for drinking. These trappings of civilization entered the Pacific conveniently along with the copra trade. This trade made coconuts with meat ripe for drying too valuable to permit wholesale opening of young nuts to drink their water.

The High Volcanic Islands

The high islands are formed of volcanic rock, mostly fine-grained black basalt. The iron in it gives the soil a red-orange color which stands in sharp contrast to the lush green when a hillside is scarred. Without the humus of decaying vegetation, this soil is not very fertile either, but it builds up its fertility more rapidly than coral sand and contains a richer store of the minerals necessary for life. Consequently, the high islands become a natural focus for seafaring visitors from coral atolls often hundreds of miles away. In the past the visitors came to share in the greater variety and abundance of foods, woods and other vegetable products produced by the volcanic soil. Today, in addition to these lures, there are medical services and other benefits of civilization available at the administrative centers.

Many of the high islands are truly magnificent. From a distance they appear buttressed against the watery world about them by sheer black basalt cliffs slashed by deep, thickly wooded valleys and topped by a mat of green wherever vegetation can gain a foothold. The precipices often alternate with stretches of flat or rolling foreshore, and back toward the middle of the island are steep peaks, their tops hidden by mist and low clouds. Not all are like this, for the older islands have weathered down to less dramatic hills and valleys, their scenic disadvantages more than compensated for by the increase in arable land. Along the shore, or farther out, enclosing a lagoon, is the ever-present coral reef, portent of the future when, millenniums from now, the mighty island will

have disappeared, leaving behind only its reef. It will then be a typical atoll, punctuated at intervals with low coral islands.

Nearly a century ago Charles Darwin put forward the theory that both the high and low islands had a common origin, a theory that waited until the first atomic-bomb tests on Bikini for its final proof. The islands came into being in an appropriately dramatic fashion, each born of a vast undersea volcano which buckled up the ocean bottom and welled up with lava—seething in the boiling, steaming water—until it burst forth above the surface of the ocean and gradually cooled. Though inside the hard outer shell the molten rock stayed hot long enough to begin crystallizing into fine-grained basalt. As soon as the outer part was sufficiently cool, coral began building along the shore line where the warm tropical water broke in waves on the jagged rock.

Polyps Build the Coral Reefs

Coral is formed by uncounted billions of tiny organisms, called polyps, which extract calcium carbonate—the principal ingredient of plaster—from sea water and build about them tiny shells, cemented to the rock below and soon surrounded by others above and on all sides. They can adhere to any rock but require two conditions for their growth: warm sea water and plenty of oxygen. As a result, coral appears only in or near the tropics and grows near the surface of the water. The polyps thrive and multiply most vigorously where the massive ocean waves smash on the shore and churn bubbles of air profusely into the water.

No sooner have the volcanic islands been heaved up from the ocean floor than they begin slowly to sink back. The earth's surface seeks a balance as it floats on molten rock deep below. The vast weight of rock bears down on the solid crust, and it gradually gives away under the load, often pulling down the ocean floor around it to form depressions of great depth. The sinking is very slow, and meanwhile the billions of polyps along the shore of the new island are building upon each other. When the organisms

die, calcium carbonate in the water continues slowly to precipitate in and around the cores of the microscopic shells, so that in time lower levels turn into dense, strong limestone. At the surface, more coral is constantly growing, much of it beautiful to look at underwater, but fragile. The pounding waves break off fragments which fall inside the reef to fill the widening lagoon or outside to build up a slope down to the ocean bottom. The coral grows upward over its original shore-line foundations, while the size of the sinking island showing above the surface gradually decreases. The lagoon grows larger until only the highest peaks of the original island appear as separate islands inside the barrier reef, and finally disappear completely beneath the surface, smothered in coral. There remains a typical reef atoll, its outline determined by the shore line of the volcanic island upon which it was born. Low islands appear here and there where the waves have driven sand up onto the still growing reef. Seismographs (earthquake recorders) on Bikini recorded the change in path of the shock waves, from the bomb, as they passed through the denser basaltic core beneath the coral crown of the atoll. Thus was demonstrated the correctness of Darwin's century-old surmise.

The Lagoon of Truk

Surprisingly enough, among all the larger islands of the Pacific only a few are in the middle of the change from high to low islands. Truk, in the Caroline Islands, is typical and shows its history clearly. The barrier reef of Truk encloses a lagoon thirty to forty miles across, with islands projecting steeply here and there inside, none of them more than five miles across. These are the mountaintops of a once great volcanic island. Each little island has its own reef about it, narrower and growing more slowly than the barrier reef because the smaller waves in the lagoon carry less oxygen down into the water. A few low, sandy islands or half-submerged reefs inside the atoll mark the location of somewhat lower peaks which have recently disappeared under



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the coral. Most of the other large, high islands of the Pacific have only begun to sink away and have fringing reefs at or near their rocky shores.

The waters that pound against the reefs and stretch for such vast expanses between islands are uniformly warm. No cold currents intrude into the central and western Pacific. The microscopic plankton, which abounds in colder waters and gives them a dark greenish tinge, is com-

paratively scant in warm seas, leaving the water about the coral reefs crystal clear. From the air the varying shades of blue (reflected from the sky) indicate depths so clearly that a color photograph can substitute for an accurate chart of the waters in a lagoon. In shallower waters the changes in color can even be used to navigate boats through the reefs.

In the open ocean, the waters move in three great currents. The South Equato-

THE HARBOR OF PAPEETE, Tahiti's port town. It is a haven for large and small craft. Tahiti is noted for its beauty, and many artists and writers have been attracted there.

WILLARD PRICE





R. I. NESMITH

A POLYNESIAN aiming a pronged fish spear. Polynesians are as much at home in the water as on land, and the vigorous outdoor life they lead shows in their strong, muscular physiques.

rial flows westward just below the equator, dragging its feet, as it were, and not quite keeping up with the hurried rotation of the earth. Its counterpart several hundred miles to the north is the North Equatorial Current, also running westward. In between, the Equatorial Countercurrent drives eastward, carrying back the water piled up by the other currents moving west. Only part of this water can be accommodated by the endless swirl of currents that circle about the northern and southern Pacific shores, clockwise in the north and counterclockwise in the south. The borders between the equatorial currents shift about somewhat, but, because they are all warm, the changes make little difference to life on the islands. The shifts, however, cost people their lives on those occasions when the navigators of sailing canoes are becalmed and assume they are drifting one way when actually they are traveling the other. The course they set when the winds rise again carries them not to the speck of land they seek but out into the trackless ocean where they die of thirst and exposure. As we shall discuss later, some of the island people are highly effective navigators, but they depend on dead reckoning and once lost through calm or storm can find land only if they are lucky enough to sail nearby.

Where Trade Winds Meet

The trade winds follow somewhat the same pattern as the currents below them. The northeast trades blow westward down toward the equator, while the southeast trades also blow westerly toward the equator from the other hemisphere. In between are the doldrums. Here the air blowing from north and south meets and rises to great altitudes and then flows toward the poles. The rising air leaves beneath it unstable winds, periods of flat calm and occasional great, tortured tropical storms—called hurricanes in the central Pacific and typhoons to the west. The doldrum belt follows the sun, shifting across the equator to visit the tropics of each hemisphere during its summer months. When the doldrums move over, they disrupt the even flow of the trades

and make hazardous any voyages in small craft out of sight of land.

People who live on small islands, to whom the sea is as important as the land, are very conscious of the weather and particularly of the winds. The trade winds are friendly, reassuring, reliable and useful. Relationships between people who live on islands that lie on a line at right angles to the path of the trades—so that one may sail between them on one tack with the wind on the beam—tend to be closer than those on islands between which one must sail up against the wind in one direction. When the trades are blowing, there is enough rain but seldom too much, the storms are mild and rare and life is predictable and good. The doldrums bring uncertainty, inconvenience, discomfort and the possibility of a storm which can sweep waves into or even over a low island. Even the high islands suffer great damage in these storms which flood the low-lying gardens and taro swamps, uproot dozens of vital coconut and breadfruit trees and wither many more with onslaughts of flying salt spray.

The islands of the tropical Pacific Ocean fall into three major divisions based largely on differences in the speech, culture and physical appearance of the natives who live on them. Their names are misleading: Polynesia, derived from Greek words meaning "the many islands," although the leadership in number of islands is not readily apparent and would probably rest on how big a speck of land one dignifies by the name "island"; Micronesia, "the little islands," despite the fact that all three divisions have their share of large and small islands; and Melanesia, "the black islands," referring apparently to the color of the natives' skin, although some Micronesians are equally as dark in color as the Melanesians.

Polynesia's Extent

Polynesia stretches over the greatest expanse of ocean of the three, extending from Hawaii in the north to New Zealand in the southwest and Easter Island in the southeast. New Zealand does not concern us here. It lies far to the south of



FRENCH GOVERNMENT TOURIST OFFICE

TAHITI CHARM—the girl is a winning example of young Polynesian women.

the rest of Polynesia, well out of the tropics. Both Easter Island, famous for its great carved stone heads, and its nearest neighbor, Pitcairn Island, final home of the mutineers of the *Bounty*, are slightly south of the Tropic of Capricorn and have no real Polynesian population. Leaving these out, our Polynesian triangle still runs from Hawaii respectively southwest to Tonga and southeast to the Tuamotus, some 2,500 miles on a side—to say nothing of a string of little isolated Polynesian islands scattered along the northern edge of Melanesia for a thousand miles still farther west.

Polynesia has provided the setting for the vast majority of tales and descriptions of the South Seas. The people are light in color, near to that of Italians and Spaniards, often tall and strikingly handsome, with strong, square faces whose prominent cheekbones give them an exotic touch in Western eyes. Their hair is wavy brown or black. Although the Polynesian ideal of feminine beauty favors fatness, particularly in the upper classes, the younger women are often very attractive by Western standards—a fact that made many of their early contacts with crews of Euro-

pean ships bloody and unpleasant for the Polynesians. The charm of these people and the beauty and ease of their islands have attracted a steady stream of artists and writers—great, near-great and just wistful beachcombers—particularly to Tahiti, as well as Samoa. Gauguin, Robert Louis Stevenson and an increasing number of lesser figures showed the way and provided the inspiration. Charles Nordhoff and James Norman Hall teamed up to become the highly effective apostles of more recent generations.

Arts and Crafts of a High Order

The early explorers in Polynesia, from Captain Cook onward, were amazed to discover a people whose implements included no metal and yet who executed beautiful wood carvings and feather work and built canoes with which they moved whole communities to islands a thousand miles away over the open sea. Although the explorers failed fully to understand the subtleties of sacred taboo and the supernatural qualities of rank, they found a complex system of noble families lording it over the commoners, reaching a peak on the Hawaiian Islands in royal families.

The superficial similarities with European society at the time left the early discoverers awed, and the later visits by Polynesian nobility to Europe were less absurd than one might expect. Hawaiian royalty became sufficiently concerned with the purity of the ancestral line to institute the custom of marriage between brother and sister to produce an heir, a device known elsewhere only among the Incas of Peru and the pharaohs of ancient Egypt. The similarity of Polynesian noble lines with those of Europe was the more striking because, unlike the other Oceanic peoples, the Polynesians reckon descent through both the male and female lines. In Micronesia and Melanesia, kin groups trace their ancestry through only the male or the female line—more commonly the latter.

Polynesia was the first of the three groups of Pacific islands to be colonized extensively by missionaries, traders, adventurers and other outsiders, virtually

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all European. Eventually the combination of fairly large size, good harbors and the lack of malaria (true of Micronesia as well) led practically all the major European powers to stumble over each other in attempts to claim and develop the islands.

Disease, particularly smallpox, almost at once caused a tremendous loss in population. On most islands this loss has never been fully regained in spite of the ever growing caliber of medical and health services available. Tuberculosis and pneumonia, the latter often resulting from colds and other respiratory infections of which new strains are constantly being brought in by foreign visitors, take a slower but steady toll throughout the Pacific.

Although immigration has been severely limited on most islands, Hawaii was opened up early to laborers from Asia and immigrants from the United States and, particularly, Portugal. These newcomers intermarried with the remaining native population and practically obliterated

it, so that there are now a mere handful of pure Hawaiians left. Yet even to the present day, a dash of Polynesian blood is announced with pride by its bearer.

The Polynesians adapted readily to many aspects of Western technology and learned especially to build and sail cutters and larger boats of European origin. No open-water voyages are made nowadays in native boats. Metal tools, of course, replaced bone, shell and stone implements very early. Electricity is commonplace on many of the larger islands. The Polynesians in general have been weaned further away from their ancient methods than have the other groups. During World War II, although many Polynesian islands played important roles in the supply and communications support of operations farther to the west, none of them was the scene of actual fighting (except for the attack on Pearl Harbor).

Melanesia, "the black islands," stands in considerable contrast with Polynesia in



GOVT. OF AMERICAN SAMOA, DEPT. OF THE INTERIOR

KAVA CEREMONY in Samoa. Water or coconut milk is added to the crushed roots or leaves of the kava plant (a pepper relative). The beverage at first tastes sweet, then pungent.

the history of its relations with the West. The anopheles mosquito, carrier of malaria, is prevalent throughout most of the area (Fiji and New Caledonia are exceptions), and the effect of malaria on Caucasians is almost as disastrous as are smallpox and tuberculosis on the native islanders. Furthermore, the appearance of the natives is quite forbidding to a Westerner. They are very dark in color and Negroid in appearance, with hair that is tightly curled. This permits the men in particular to let it grow into a tight, fuzzy ball which rises from their heads in a spectacular mass, decorated with ornaments stuck in here and there. Finally, cannibalism was formerly commonplace (and possibly there are occasional outbreaks even today). Some of its appeal rested upon the logical, if unpleasant, observation that it takes much less effort to go over to a neighboring village or island and get a "long pig" than it does to raise a real pig. Real pigs eat the same food as humans and do nothing toward raising their own vegetables. More important motives, however, were vengeance and the magical benefits of eating a brave man. The combination of these factors—malaria, physical appearance of the natives and cannibalism—gave the islands of Melanesia a reputation of substantially less charm and safety than that of Polynesia, with a resultant delay in the inroads of Westerners. Of course, not all Polynesians are attractive, and cannibalism also occurred on some Polynesian islands, but Melanesia always had a worse reputation. A number of heroic missionaries were the first white men to set foot on several of the islands. Many lost their lives to spears or disease. The traders who followed them were few in number for many years, and the area was definitely not a mecca for beachcombers.

Islands of Melanesia

The islands themselves, many of which are high and large, lie well within the tropics, extending in a long arc from the Admiralties and New Britain, off the northeast coast of New Guinea, southeastward to Fiji, close to Polynesian Samoa.

Many islands are covered with dense jungle growth, in part a result of the practice of clearing ground for gardening by burning it off. When the fields are later abandoned, the trees are gone, and thick brush covers the area. This is hard to penetrate on foot and has provided yet another bar to exploitation or even exploration by foreigners. However, the brush tends to hold the soil and is easily cleared again after the ground has lain fallow for a time. So burning makes good sense for the small gardeners on these jungle-clad islands.

Melanesian Men's Societies

One of the more striking features of social organization on many of the islands of Melanesia is the system of men's societies based on age groups. Adolescent boys are initiated into their society in elaborate and often frightening ceremonies conducted by masked figures representing demons bent on the youths' destruction. Pigs are slaughtered for a feast. Finally the boys, sworn to secrecy, learn that the demons are none other than the men of the village. Members of a group of initiates belong to the same society all their lives, rising in rank as they grow older. The next group of adolescents joins a different society in a complicated round robin of ritual memberships. Coupled with this is a system of reckoning kinship which in some parts of Melanesia reaches a complexity equaled only in Australia—and anything more complex than the Australian systems would defy the imagination.

The houses within which most of the activities of the men's societies take place are spectacular structures. They are built of timbers lashed together and topped by a peaked thatched roof which curves upward at one end to an imposing height. The house posts bear carved wooden figures.

The Melanesians adopted European metal tools as rapidly as they could obtain them, engaged in trade with sandalwood and later copra as their principal export and were subject to administrative control and medical attention by Westerners. In many cases they were converted to Chris-



UNATIONS

A FAUTASI (LONG BOAT) puts out to sea from a Samoan island. For a special occasion, garlands adorn the craft. The oarsmen can pull it through the swells with astonishing speed.

tianity by missionaries. Otherwise they generally followed their old customs and standards as closely as any people in the Pacific—all this until World War II. Guadalcanal and Bougainville in the Solomons and Manus in the Admiralty Islands were the scenes of the most epic of the battles, but practically all the Melanesian islands felt the impact of the war. Where bases were built, the influx of American GI's was a fabulous experience, puzzling and disrupting, but exciting and profitable in material goods, many of which were put to uses far from their original intent. James Michener's *Tales of the South Pacific* is set in Melanesia, and, although it is told largely from the viewpoint of the GI's, it gives a good picture of the manner in which the islands were overwhelmed.

The letdown after the war was over and the bases were dismantled created a difficult period of adjustment for many Melanesians. This adjustment gave an odd twist to a phenomenon that antedates the war, the so-called cargo cults in western Melanesia. Such a cult begins with a person having a vision, in which is predicted the arrival of a ship loaded with all

the material bounty civilization can offer. The natives will then live in luxury for the rest of their lives. Believing this prophecy, hundreds of people destroy their possessions and await the bonanza which never comes. These bizarre cults still sweep villages and whole groups of islands at intervals. Now, however, it is often not merely a ship bearing a wonderful cargo that is predicted but an American base and GI's.

Micronesia completes the roster of the tropical Pacific islands. Whereas Polynesia straddles the equator to extend the full width of the tropics, Melanesia, in the western ocean, lies entirely to the south of the equator, and Micronesia (with the exception of part of the Gilbert group) to the north.

The Micronesian islands lie on three sides of a triangle, with empty ocean in the middle. In the east are the Marshalls and Gilberts, all low islands, running southeastward toward Polynesia. On the west is the short side of the triangle, the Marianas, all high islands, including Guam and Saipan. Along the south, paralleling the equator are the Caroline Islands, both high and low.

The Micronesians, with the exception of those on Guam and Saipan, have been surprisingly little affected by their century or so of continuing contact with foreigners. The German Jaluit Company, which had both trading and administrative functions, developed the Marshalls and (later) the Carolines. It maintained law and order and fostered the copra trade but made little effort otherwise to change the native way of life—except for registering land titles with sons designated as heirs, in accordance with German custom, on islands where inheritance follows the female line. The Jaluit Company dominated the scene, and the effects of visiting whalers, free-lance traders and the earlier efforts of the Spanish in the Carolines were of minor importance.

The Spaniards concentrated their efforts on the Marianas until they lost Guam to the United States in the Spanish-American War and withdrew from the area. During the nineteenth century, Guam was the showcase for Spain in the Pacific. The Guamanians were strongly Europeanized and mixed with foreign strains in both race and language. (Today they speak a mixed language called Chamorro.) After disturbances on Saipan, the Spaniards removed everyone on the island to Guam. Later they imported Guamanians and natives of the Carolines to develop sugar plantations on Saipan. However, the Marianas are a special case in Micronesia and need not further concern us here. The Gilberts, with the exception of Ocean Island, which is rich in phosphates, have been developed by the British at the same modest pace as the rest of the islands of Micronesia.

Micronesia under the Japanese

The Japanese took over all of Micronesia except the Gilberts and Guam in 1914 and soon began intensive economic development to support their overcrowded home islands. This changed increasingly to a military build-up during the 1930's. In both cases the skilled labor was provided by Japanese and Okinawans so that the Micronesians learned little of foreign techniques. After the second World

War, the United States took over the islands held by the Japanese, under a United Nations trusteeship. Since then efforts have been concentrated on trying to make the Micronesians self-sufficient economically and politically.

Micronesia has thus been unique in the Pacific in the degree to which it has been treated as a whole, each island and group (except the Marianas) subject to a common policy. It is also exceptional in the way it has become enmeshed in the flux of history without any major assault on the fabric of native custom. Some islands—such as Kwajalein, Bikini and Eniwetok—were rendered practically uninhabitable by the war and its atomic aftermath. But natives on the other islands tend to view the war as a time of trouble that is now mercifully past. Even such battered islands as Peleliu, Guam and Saipan have recovered in fair degree.

The Variety of Micronesians

There is much variation in the physical appearance of Micronesians. They range in skin color from the lightness of Polynesians to the darkness of Melanesians. They have straight Mongoloid hair, wavy hair or even tightly curled hair, but it is almost always black. They are tall or short, stocky or thin. In many respects the Micronesians resemble the Indonesians and Filipinos to the west of them. However, there is increasing evidence from studies of language, culture and traditional history that Micronesia was not populated directly from the Indonesian area. Rather, there was a movement of people through New Guinea and Melanesia who entered what is now Micronesia in its southeast portion and worked back to the north and west. Even the Polynesians may have followed the same route through Melanesia to reach their present islands.

Like the Polynesians, the Micronesians have nobility and commoners with multiple noble lines of varying rank. They differ from the Polynesians in tracing descent through the female line and lack much of the supernatural and ritual aspects of taboo.



EWING GALLOWAY

FIJI ISLANDERS pound on dugouts to announce church services. The Fijis are Melanesians, with dark skins and fuzzy hair, and are among the most progressive of all this group.

Truk and the low islands to the west of Truk are an exception in that they have only local chiefs, representing extended family groups which happen at the time to be the most numerous and powerful.

Only a handful of Micronesians have thus far learned to build their own Western-style boats. So Micronesia remains the only part of the Pacific in which the natives regularly make long ocean voyages—up to two hundred miles or so—in canoes, using navigational techniques that

are among the most intricate ever studied.

Despite the differences between Polynesia, Melanesia and Micronesia—only a few of which have been highlighted in the preceding pages—in the daily round of life on the Pacific islands the similarities from one island to the next outweigh the differences. Probably by now the differences in the old cultures are less important in determining the way of life on the various islands than is the amount of change brought about by foreign influ-

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ences. However, the old cultures and particularly the attitudes they instilled undoubtedly affected in various ways the response of different groups of natives to outsiders. For example, the natives on the high islands of Truk were accustomed of old to find people from distant places with different customs sailing into the lagoon on canoes. The Trukese learned to treat them with respect to their faces, though sometimes derided them behind their backs—a formula well adapted to dealing with European administrators. Perhaps because of this experience of their ancestors, the Trukese have taken the Germans and the Japanese and the Americans rather easily in their stride, learning with some facility how to handle both the

foreigners and their policies.

Much of the similarity in daily life stems from the sameness of climate and of resources on the Pacific islands and in the seas and lagoons surrounding them. All the islands have the limitation of essentially infertile subsoil with only a thin layer of humus on top. On the low islands this subsoil is formed of the almost sterile coral sand, which underlies everything, while on the high islands the steep slopes constantly washed by downpours will not hold a thick layer of soft rich soil. The only place where such soil can accumulate deeply on most islands is in swamps—in which, through much of the Pacific, thrives taro.

Taro is a gray-colored tuber topped by



EWING GALLOWAY

A STREET IN SUVA, on the island of Viti Levu. Suva is the capital of the whole Fiji Islands colony. It has a fine harbor inside a barrier reef that forms a natural breakwater.

heart-shaped leaves, several varieties of which grow best in the soggy soil of swamps and can tolerate some brackishness, although a real flood of sea water in a storm can stunt or kill them. Other types of taro grow on dry land and, especially in Melanesia, are cultivated extensively. Some varieties grow to great size, with a single tuber of many pounds in weight and leaves taller than a man. When the tuber of swamp taro is dug out, the shoots are stuck back in the ooze, where they grow a new root worth digging after only a year—or two if there is plenty of food and one can afford to let taro grow.

Taro is usually baked or steamed, the outer skin cut off, and the tuber pounded with a stone pestle on a hardwood plank into a gray mass. This process of baking or steaming, peeling and pounding is a common way of preparing everyday starch foods of all kinds in the Pacific. It results in a meal that is notably dull and bland to the Western palate. Such food is frequently referred to by the Hawaiian term "poi," although in Hawaii the word refers only to taro poi. In Polynesia, taro and other forms of poi are commonly kept for several days before eating. The warm climate causes the poi to ferment which lends some tang to the taste. If packaged in leaves for eating, the fermentation of poi is uneven and causes the growth of a mold that is extremely unpleasant.

Sweet Potatoes, Yams and Manioc

Other important root crops in the Pacific—although they grow well only on high islands—are sweet potatoes, yams and manioc (also known as cassava or tapioca). Sweet potatoes are common in Polynesia and parts of Melanesia. Yams, which are similar to the sweet potato but larger, are a favorite food for feasts. A really large yam takes years to grow and, roasted whole, demonstrates that its cultivator could afford to leave it in the ground, having plenty of other food to eat. Yams are an important staple food in Melanesia, second in importance only to taro on most islands. Manioc was introduced in historic times and is grown par-

ticularly in Micronesia, especially on those high islands where for some reason yams are not cultivated. It is starchy and filling but almost completely tasteless after it has been cooked. It is usually prepared only when there is not enough taro and breadfruit is out of season.

Breadfruit—Food for the Picking

Breadfruit grows on trees that often develop to great size—the largest, strangely enough, being found on low islands. Breadfruit trees have the ability, essential on these islands, to support and nourish themselves with shallow roots which extend outward through the thin layer of fertile soil. As the tree grows, the roots swell above the surface and often develop slablike buttresses to support the trunk against the wind. On islands where breadfruit is important, the introduction of cattle or any heavy-hoofed animals that may damage the roots can create serious problems. The fruit itself is somewhat smaller than a football, with a shiny green exterior which is in most varieties bumpy or even spiny. Inside, it is starchy and fibrous, forming a rather dry poi when prepared in that fashion. Again, most Westerners find it a pretty dull food (even when, after a couple of days, it has grown a mold luxuriant in the beauty of its colors). Some favor French-fried breadfruit while others feel the dish would be greatly improved by substituting potatoes.

However, many of the islanders view breadfruit as the ideal food, and when away from their islands are as homesick for breadfruit as for home. This is probably because breadfruit trees bear only once a year, and an island is lucky on which all the trees do not bear at once. When the fruit is ripe, there is a time of plenty. Then a man can return from an hour or two of climbing and picking, burdened down with food—on which he has had to expend no previous effort. The island rings with the "clop! clop!" of men pounding steamed breadfruit and no one is hungry. It is indeed a time to look back upon when the breadfruit is gone.

Against these barren days high islanders can preserve breadfruit—but this is a

very different thing from the fresh product. The raw fruit is peeled and buried in pits lined with leaves, where it ferments for months. The nearness of water beneath the surface of most low islands makes this such a hazardous operation that it is not usually undertaken there. The presence of much water will cause fermentation to become rot—a fine distinction but an important one. When the breadfruit is removed, steamed and pounded, it has the odor of ripe cheese—which provides an interesting commentary on cultural bias, since most Westerners are as repelled by preserved breadfruit as the natives are by ripe cheese. Whatever we may think of it, there is some evidence that breadfruit is higher in vitamin content when preserved than when fresh.

Reddish Wood from Breadfruit Trees

Breadfruit trees contribute almost as much to the island economy in their timber as in providing food. Breadfruit wood is reddish in color, easily worked, resistant to splitting and—in some varieties—almost completely impervious to marine rot and borers. Out of it are made canoes, house timbers, bowls, boat bailers and any number of other objects. It is the all-purpose wood of the Pacific, used wherever the special toughness and strength of hardwoods are not essential. Usually old trees, large and past bearing, are cut down laboriously for the wood or salvaged when a storm fells them. Frequently the lower part of the trunk is already hollow, simplifying the task of the canoe-builder.

The sago palm is a common source of starch food in Melanesia where, in combination with extensive cultivation of taro and yams, it pushes breadfruit into a minor position. When the sago palm matures, it is cut down, and up to seven hundred pounds of pith are removed from the trunk. After the fibers have been removed, this pith can provide a vast quantity of bland but filling puddings.

Common to nearly all Pacific islands is the coconut palm. Coconuts grow both inland and along the shore, where sea water may lap about their roots with no

harm to the tree. Ripe nuts frequently fall in the water where they float away, the hard outer shell watertight until the nut lands on another shore and germinates. Coconuts require no care. Even planting is simple, the sprouted nut being set down on a likely piece of ground with perhaps a little fence to discourage hungry pigs, and then left to root and grow. After six or seven years it begins to bear and will still be bearing when its planter is long dead. The nuts are clustered under the rather tattered-looking crown of green fronds, high up the smooth, curving trunk. The trees bear continuously, with nuts in every stage of development in the clusters. New nuts reach full size in a few months and then mature over a longer period.

The green nuts have a damp, fibrous outer casing which is easily cut to expose the comparatively soft inner shell. This is filled with water which is slightly sweet and surprisingly nutritious. On boat trips of several days, the islanders often bring along nothing but large numbers of green coconuts for both food and drink. On these occasions the nut is cracked open after drinking; then the soft white jelly, which sticks to the inner surface of the shell, is scooped out. It is a refreshing food.

As the coconut matures this jelly hardens and thickens to form a firm white meat almost an inch thick, rich in oil. The coconut that is grated on our cakes and desserts is produced at this stage. On the islands it is often grated and squeezed out, yielding a sweet white milk which can make a rich meal when poured over an otherwise bland starch food.

Copra, Basis of Pacific Economy

However, the coconut's primary use is for copra, the big cash crop throughout the Pacific. Copra is the source of coconut oil, used in many products. The ripe nuts are split by slamming them down with great precision on a pointed hardwood stake. The meat is then scooped out with knives, sliced and placed upon racks to dry in the sun. This is usually a family operation, dull and messy but prof-

itable. The acrid smell of drying copra is everywhere, a reassuringly familiar aspect of the island scene which one learns to miss with nostalgia after leaving. The drying racks are set up next to little thatched sheds, and a sudden shower sends everyone scurrying to slide the family racks under cover from the rain.

Strong Twine from Coconuts

The water, milk and meat of coconuts only begin the list of uses of this versatile tree. The outer husk of the ripe nuts contains fibers that, when separated, can be twisted into sennit twine of amazing toughness. It is quite impervious to rot from dampness or sea water. Despite the advent of nails and screws, sennit continues to be used widely for lashing together the timbers of houses and the parts of canoes, tools and the like. Expert craftsmen can twist sennit into sizable ropes which, after use, become quite flexible. The hard inner shell of the ripe nut can be cut and carved into ladles, scrapers, combs and cups, and will take a high polish.

Even these various uses do not begin to use up all the husks left over from cutting copra. Small boys take great delight in mounting sticks and bits of coconut frond in the half husks and setting armadas of little boats sailing off with the trade winds over the horizon. The coconut palm can also warm the hearts of adults, for the sap may be tapped from the tip of the young blossom into a cup and fermented in a few days into a pleasant-tasting wine. When fresh, this juice is also excellent food for small babies.

All these different kinds of food that the islands produce, some literally growing on the trees ready for picking, may give the impression that here at last is the land of plenty. On the high islands this is, in a sense, true. Most of the Pacific islands can, and frequently do, produce more than the natives need. But such production is not accomplished without labor.

Even during the breadfruit season there is much work; the trees are tall and often risky to climb. A man has to pick a heavy load and carry it to the village early

enough in the day to finish cooking, pounding and wrapping it before evening lest it spoil. Cooking means collecting firewood and heating stones in a pit, while pounding is long and arduous. Furthermore, breadfruit is in season only a few months of the year. During the other months, food comes from the gardens, which have to be cleared, dug up, planted, weeded and so on, up to the time of harvest when essentially the same kind of work needed to prepare breadfruit begins.

The gardens are usually inland, for near the shore there is more sand than soil. Inland means a long walk, carrying tools, water and often small children, plus a load of produce on the return trip. Inland there are trees which cut off the breeze, and one works for hours under the broiling sun. So, although one can be reasonably sure of eating in return for work, the work is neither light nor quick. Sometimes, of course, prolonged drought or the damage of a storm (or foreigners having a war on the island) can create a real and acute shortage of food, though this is exceptional.

Unless it is to be allowed to ferment, once the food is prepared it must be eaten because in three or four days it will spoil. Since preparing a batch of food is an all-day operation, preceded by the collection

TREASURY BUILDING in Nouméa, New Caledonia. Some transpacific planes stop here.

EWING GALLOWAY



of firewood and other supplies, frequent preparation could mean an endless round of work. At the same time fishing, gardening, cutting copra, building houses and canoes and any number of other tasks must be kept up. However, it is in food production above all that one leans upon the co-operative efforts of one's kinsmen.

Family Ties among the Islanders

The Pacific islander is born (or sometimes adopted) into a group of people who will be his partners in everyday activities for the rest of his life, with more added when he marries. This group does not by any means include all the persons with whom he recognizes a relationship—who may be scattered over a number of islands—but rather the core of closer kin who usually live fairly near to one another. The membership of this core varies in the different societies and often excludes persons that we would consider close relatives. But however it is made up, it is usually of a size for co-operation in the tasks required by the particular culture. Co-operating is not a matter of choice. The individual co-operates or else finds himself cast upon his own resources in an environment where even Robinson Crusoe needed his man Friday.

The arrangement has many advantages. The matter of preparation of staple foods we have just discussed is one of the most important, for various members of the kin group can take turns preparing food. One household will make enough for the several families comprising the group. Two or three days later another family will make another batch of food, ready when the first has been used up or is on the verge of spoiling, and so on from one household to the next.

Although the distributor of food on a given day is greeted with courteous pleasure and thanks, implying that he is doing a real favor to each of the recipients, if he failed to pass the fruits of his toil around the kin group he would be very ill treated indeed. However, since the donor is assured of a return on his investment in the very near future, it is most unlikely that he would skimp on a productive house-

hold. The ones who are likely to suffer are the old and the permanent invalids, unable to produce any more. The co-operative kin group theoretically provides perfect social insurance, but unfortunately in time of want the distribution tends to favor those who will make a return. Then the aged and infirm must get along with very little—nor complain lest they be considered cantankerous and find themselves ignored completely.

Actually, although the nonproductive members of the group are in a particularly precarious position and must exercise great restraint, everyone must be careful. Together his kinsmen may make life very hard for the individual who dares to slight the group—unless, of course, social status or rare skills place him in a position of power and immunity.

Little systematic study has been made of the effects on personality development of this constant self-control. It appears that on some groups of islands the natives can allow themselves quite a bit of freedom of expression. Elsewhere the people are much more cautious in revealing their thoughts and feelings. There is a difference between individuals, of course, but also a broader difference between the members of one cultural group and another, though physically they may be quite similar. The natives of Truk have been studied from the psychological standpoint and show rather clearly the limiting effects of having to get along with one's kinsmen. They are worth discussing briefly because something of the same processes are at work on all the Pacific islands (as well as elsewhere in the world) in varying degree.

Dependence on One's Kin

On Truk even the child at play learns to treat his older brother, or sister, with restraint lest he find himself in a squabble with no one to take his side. As he grows older he begins to take an active part in the economic and social life of the community and becomes increasingly aware of his dependence upon his relatives. It is easy to give offense, and he finds that if he has strong feelings the best thing to do is hide them.

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A Westerner coming to these islands finds the natives quick to laugh—or sometimes abruptly sullen—and often easy people with whom to make friends. However, as time goes on and the Westerner seeks real companionship with his new-found friends, he senses a certain superficiality which at home he would call emotional immaturity. He concludes that the islanders are just children at heart. By our standards they are, because, dependent upon the good will of their kinsmen, they cannot permit themselves the luxury of trying to change society, of reprimanding an elder they know to be wrong or even of really loving anyone lest their relatives disapprove and leave them the choice of love or isolation—and hunger. Even thinking about such things can cause worry, for the thought might slip out in word or deed and bring on trouble. So the best thing to do is just go on from day to day without examining too closely one's own feelings or those of others. The restraint that the Trukese exercise as the

price of security thus becomes a part of their whole way of thinking and makes them superficial in their dealings with others and, in Western terms, emotionally immature.

Nevertheless, even among people like the Trukese and more frequently in other groups, individuals arise who are capable of dedication, initiative and mature wisdom. They may, if they are fortunate, rise to leadership—and the Pacific has seen some brilliant leaders—or they may suffer frustration and the life of social misfits. Employment in the offices of the foreign administrations often provides niches for the latter, where they may escape the restriction of their own society at least part of the time. This is not an easy way out, for they are caught between two cultures and not really full participators in either. Yet such persons frequently play a crucial role, for better or worse, in translating the value and significance of one way of life in terms understandable to the other.

We have digressed in order to describe

PHOSPHATE MINING on Nauru. The phosphate lies among coral formations. After the mineral is removed, the pinnacles of coral remain, looking like the summits of miniature mountains.

AUSTRALIAN NEWS & INFORMATION BUREAU



the social and psychological setting of island life and must now return to our discussion of everyday life. No meal is complete without some protein. The islanders complain that they cannot get full on taro or yams or breadfruit alone, but with just a little fish to accompany the starch food they are satisfied. On some islands there are a few wild animals—rats, wild pigs, or birds—and there are domesticated pigs and chickens around almost every village. However, these are too precious for routine consumption and are eaten only at feasts, or when the good fortune of the hunt or bad fortune of an accident yields meat that must be eaten before it spoils.

All the Ways of Catching Fish

The tropical seas abound in fish, and the islanders know almost as many ways of catching them as there are kinds of fish. Most fishing is done on or near the coral reefs where little fish congregate to feed on the rich marine life and the larger fish gather to eat the little ones. There are a variety of hand nets used by fishermen standing in the shallow water on the reefs. One of the most spectacular is the throw net, a flat circle of fine-meshed netting once made of fiber from banana or hibiscus bark, now of imported line. It is bound with a heavier line around its edge along which are hung weights at close intervals. A skilled fisherman stands motionless, holding the net suspended from the middle, until he sees a school of fish swimming by. Suddenly he gives the net a twisting throw that carries it over the glittering, multicolored mass. The twist spreads the net out, and it falls on the school so fast that the fish cannot escape; the weights carry the net to the bottom with the fish struggling inside.

Other nets have rigid frames which are held in the hand, ready for a quick dip under a swimming fish. Some of the frames are V-shaped. Carrying one in each hand, women form a line and walk across the reef dipping in their nets and driving schools of fish together as they close in. With their nets rising and falling on each side, the women look like grotesque butterflies working slowly across the reef.

Smaller dip nets are also used to catch small octopus and squid as well as fish. Imported line and skills have permitted the use of long seine nets, with floats on one side and weights on the other. The net is loaded on a canoe and paid out over the side with great haste and excitement, surrounding a large school of fish unlucky enough to have ventured into water sufficiently shallow for the net to reach from surface to bottom and trap them.

Spears are also used on the reefs. They are simple, straight, sharpened shafts, or more complicated with multiple prongs, held in the hand ready for a quick jab at an unwary fish or octopus. The islanders learned early to use glass, obtained from traders, for goggles. They are carved out of wood, and the lenses are sealed in with pitch made of breadfruit sap. Wearing such goggles, the fishermen swim below the surface, spear in hand, and search out fish lurking in spaces between the coral clusters. It takes long practice to locate the immobile fish, which often match the colors of the coral, and even more skill to hit them with a thrust through the water—to say nothing of keeping oneself from bobbing up to the surface at just the wrong moment. The task has been simplified by the introduction of small metal spears propelled from shafts by rubber bands, usually cut from inner tubes, although if one misses the fish the spear may shoot some distance and be very hard to find again.

Fishing in the Dark o' the Moon

On a moonless night fish will often rise to an artificial light, and the islanders exploit this habit by using torches made of dried coconut fronds. Individuals walk along the reef, holding a torch in one hand and spear or dip net in the other. Or a group swims out with spears and goggles while one man sits in a canoe kindling and holding torches. The sight of nearby reefs and others across the lagoon picked out by pinpoints of red light on a dark night is dramatic and somehow reassuring, for torch fishing is done only in calm weather with wind and sea in a moderate mood. Skin diving in shallow water at night is not a comfortable occupation. Al-



EWING GALLOWAY

FERDINAND MAGELLAN sailed into palm-studded Umatac Cove on Guam in 1521. This largest island of the Marianas was then the home of a proud, warlike people called Chamorros.

though both water and air are at fairly warm temperatures, one can become extraordinarily chilled bobbing under water and up again into the breeze of the trade winds. When a lot of people are out torch fishing, someone usually builds a roaring fire on the beach. One could ask little more than to sit around such a fire, roasting fresh-caught butterfish in the coals and eating them tender and juicy with one's fingers while the fishermen warm themselves at the fire and sing old songs and new, and palm fronds weave back and forth in the flickering firelight. There are times like this in the Pacific when only the most determined cynic could deny the beauty and romance of the islands.

Fishing in deeper water is usually done by trolling, formerly (and in some areas still) from sailing canoes. Lures are still often made of shell, but the old fiber lines and ingenious bone hooks and tackles have been replaced by imported goods. Trolling is done close to the reefs, inside or outside the lagoon. Deep-sea fishing with long lines suspended from glass buoys is largely a monopoly of the boats that sail out of Japan.

Sailing canoes are still in widespread use in the Caroline Islands, from Truk westward. These boats, which are used

for long voyages as well as for fishing, are very seaworthy, strong and efficient. They have an outrigger float on one side and a platform on the opposite side which both provides stowage space and permits the crew to balance the outrigger. Although the outrigger does keep the boat from tipping over through its buoyancy when at rest, with the canoe under sail the float is held up by a combination of wind pressure on the sail and the weight of the crew on the platform. Then the float barely skims the water, with a minimum of resistance. This requires an agile crew and a skilled captain but makes for high efficiency. The hull is a narrow V in cross section, tapering to a sharp point at each end. The steep sides make a keel unnecessary and the hull shape acts something like an airplane wing, exerting a positive force to hold the boat from drifting downwind. On some islands the hull is even curved slightly away from the outrigger side, increasing the "lift" and at the same time compensating for the drag of the outrigger. This is pretty advanced engineering.

Canoe builders are craftsmen of a high order, carving as much as they can out of a breadfruit trunk and then building up the sides with breadfruit planks fitted so accurately that caulking is scarcely neces-

sary. The planks are fastened together with lashings of sennit twine, countersunk into the wood and covered with a mixture of clay and breadfruit gum to make an absolutely smooth exterior. The canoes are propelled by triangular lateen sails, with imported canvas effecting a great improvement over the old pandanus matting.

Expert Seamanship on Sailing Craft

Because the outrigger must always be on the windward side, tacking means reversing the direction of travel of the boat and therefore shifting the entire sail and rigging from one end to the other. This is quite a feat, in which each man must know his job and do it with speed and precision. To the uninitiated, however, the operation looks like a wild melee in which everyone will be lucky to keep from falling overboard, much less get the sail and mast shifted. Yet in a jiffy the operation is completed and the boat moves off on a new tack. These are magnificent boats, not designed for amateurs. Their only drawback, and it is an important one with so much dependent upon copra, is that they will not keep either cargo or passengers dry if there is much wind—and copra is ruined by a little wetting. Sailing canoes are still being built, but only by those who cannot yet afford or obtain a roomier and drier Western-style boat. A few are also built just for fishing, in which they are still unexcelled.

Long over-water voyages in canoes have been the most dramatic of the many romantic facets of life in the Pacific ever since the islands were originally populated by this means. In Polynesia such trips were made by paddling, often in double canoes—two hulls lashed together to provide size and stability. Only in Micronesia were sailing canoes sufficiently advanced in design to permit holding a true course under sail over long distances. These voyages still take place in the Carolines in the canoes we have just described.

Seeing a canoe twenty-five feet or so long set out with eight or ten people perched on its narrow hull to brave the Pacific deep seems almost incredible, the more so as they all appear quite uncon-

cerned over the perils ahead. It becomes even more incredible when one sees their destination—a little bit of land, perhaps a mile long, rising above the horizon only to the height of its breadfruit trees, possibly a hundred feet. Even from the bridge of a ship it can be seen only ten or twelve miles away. Yet the Micronesian navigators hit their mark every time—unless thrown way off course by calm or a storm—without compass or any device other than a trained eye and a skilled hand on the steering paddle. Basically they steer by the stars, their training including a long course on the position of the rise and fall of a large number of stars through the seasons.

There are, however, a variety of secondary aids. The trade winds, during whose season most voyages are undertaken, vary only slightly in their direction over a period of days. On a dark night the steersman listens to the sound of the waves lapping on the hull; a change in course changes the sound, and he corrects. Once one of these old navigators was lying on a bunk below decks on a trading schooner through the night. In the morn-

AN ABAI (men's house), with a high peaked roof, is erected in the Palau group, Carolines.



ing he could tell the skipper their exact position just from having listened to the sounds coming through the hull.

Most species of sea birds spend little time wandering about the open ocean. Rather, they fly directly from one island to the next and thus provide assurance to the navigator that he is on course. Bits of plants and other debris float away from islands and can provide a heading when they are seen. This is especially likely after a storm, a time when the navigator is equally likely to be seeking a clue to the nearest land. Even tiny islands change the pattern of the waves enough to be detected by a trained eye miles away. These and other techniques permit the steering of a remarkably true course and the locating of land when it is still well out of sight.

But no way has yet been devised by Micronesians or Europeans for finding one's location when really lost unless one has available the paraphernalia of European navigation: compass, sextant, charts, star tables and, above all, a chronometer to tell time. Some day these refinements will perhaps be available. Until then navigation will continue as it has from time immemorial, helped along by prayers to God and spells to ward off evil spirits.

Christianity in the Islands

The prayers to God are real and sincere for all that they are intermingled with the placation of sea spirits and ghosts of ancestors. Christian missionaries, both Catholic and Protestant, have been in the area for varying lengths of time. Practically every island in the Pacific has been familiar with them since about 1900, and in some cases far longer. Most islanders are Christians, although naturally varying widely in both their dedication and their understanding of their religion. The old native beliefs were concerned primarily with coping with the anxieties created by illness and the dangers of a strenuous life, often at the mercy of the vagaries of nature. The anxieties remain and it is not surprising that rituals directed toward reducing special local hazards—whether real or imaginary—should persist as extra insurance along with prayers to God. Most



TRUST TERRITORY OF THE PACIFIC ISLANDS, U. S.

SLAMMING COCONUTS on pointed sticks to split the nuts. The meat is then scooped out.

missionaries wisely concentrate their principal energies on the teaching of Christianity rather than on the rooting out of old beliefs, confident that as faith and understanding of an all-powerful God grow, the local spirits will recede and disappear. This does in fact seem to be happening, slowly but steadily.

Christianity is part of the new way of life that is coming to the islands. Like all new things, it has in practice its good and bad aspects. Earlier missionaries seemed bent on enforcing the appearance of morality and worship ahead of anything else. All these island peoples had their own rather rigid standards of modesty which all too often were swept aside in favor of our own. A white muslin Mother Hubbard dress became rather more important than love for one's neighbor. The resources of whole islands were strained to build massive churches big enough for twice the available population, on the premise that God's house must be bigger and better than any other. These structures have saved many lives in storms. However, the current view is that the teachings of Christ are more important than the building in which He resides and is worshiped.

Quite aside from the spiritual help the



T. J. MC MAHON

OCEAN ISLAND is one of the Gilbert group, which lies across the equator and together with the Ellice Islands forms a colony under the rule of Great Britain. Like all South Sea islanders, the inhabitants love to dance. Here their wide skirts, put on especially for the ceremony, are

of palm leaves and their sugar-loaf hats of plaited grass, while feathers decorate their wands. The island—only six miles around—is yet a valuable possession because of the phosphate of lime it exports. This mineral is widely used as fertilizer for crops.



YORK & SON

TAPA AND KAVA are two native names connected with industries peculiar to many of the islands of the Pacific. Tapa is a cloth made from the bark of the paper mulberry, and in the upper photograph we see it being beaten out on wooden blocks. Kava is a favorite drink made from the root of a pepper plant which these women are shredding.

THE PACIFIC ISLANDS

islanders receive, there can be little question but that Christian values, even when imperfectly understood, have been increasingly adopted. In the process they have eased the constructive adjustment of the natives to their role in the complex life of the outer world.

By and large, the adjustment is proceeding well. In fact, despite the blending of old and new, the islanders' moral values often appear more consistent than those of their administrators—who have outlawed warfare and then fight their own wars on a scale never conceived of on the islands before, or who preach brotherly love and then almost universally treat the natives on a segregated basis. The administrators are captives of their own culture which is far from perfect.

The biggest problems are economic. The islanders have seen the glitter of plenty and want some for themselves—or at least good boats and shoes and houses with solid walls and roofs instead of thatching or the ever present rusty iron. They are willing to work for these things, but there are not very many ways of making money to buy what they want. They can produce copra, on some islands handicrafts and on a few sugar cane. Fiji, which produces a lot of sugar, is slowly

being engulfed by the prolific Indian labor imported to work the plantations. But the islands are mostly small and must compete with other producers who can operate on a larger scale.

Big operations above all mean big cargoes for ships without delays and extra traveling. The copra produced on many of the islands, for example, is sun-dried and of premium quality, yet produced at a comparatively low cost. But even a group of islands pooling their output cannot fill an ocean-going freighter calling every six months (which is about as long as copra can be stored in the tropics without spoiling). Even if they could, loading the copra largely by hand would take days. Another ship can travel the extra thousand or two miles to Manila (if it is coming from North America), unload a full cargo of manufactured goods one day, load lower-grade, oven-dried copra from dock-side conveyers the next and be back in port while its sister is still tramping from island to island trying to fill its holds. If it is the season of hurricanes or typhoons, the hazards of lying in reef-studded harbors make the operation even less attractive. The dilemma of transportation makes almost certain the continued dependence of the islands upon foreign sponsors for many years to come.

Whether or not the islanders recognize these economic facts, one seldom hears echoed in the Pacific the cries for independence that ring out from other undeveloped parts of the world. This is undoubtedly fortunate. Although the administering powers may sometimes be misguided in their paternalism, it is clear that they keep out more harm than they bring in. The early record of profiteering traders, greedy ships' crews and disregard for the natives' interests—with the vanished Hawaiians providing mute testimony for the last—could readily be repeated in new form were the islanders left to fend for themselves. As it is, the islands have many problems, but few of them thus far are overwhelming. The romance and beauty of the island way of life is changing, but it is not being destroyed.

BY THOMAS GLADWIN



EWING GALLOWAY

FROM SHELLS of many colors and grasses, artisans of Guam fashion attractive handbags.

THE PACIFIC ISLANDS

PACIFIC ISLANDS: FACTS AND FIGURES

GREAT BRITAIN

Fiji Islands

About 250 islands (about 80 inhabited) in Melanesia. Total area, 7,056 sq. mi.; population, about 320,000. Colony administered by a governor, assisted by an executive and a legislative council. Exports sugar, gold, copra and other coconut products. Capital, Suva.

Tonga (Friendly) Islands

Three groups in Polynesia; area about 269 sq. mi.; population, 51,000. Self-governing British protectorate; monarch and legislative assembly. Exports copra. Capital, Nukualofa.

Gilbert and Ellice Islands Colony

Coral islands in Micronesia; total area, 375 sq. mi.; population, 38,000. Includes Gilbert, Ellice, Ocean, Phoenix and Line islands. Governed by resident commissioner at Tarawa in the Gilberts. Canton and Enderbury in Phoenix group controlled jointly by Britain and U. S. Exports copra and phosphate.

British Solomon Islands Protectorate

In Melanesia; includes Choiseul, Guadalcanal, Malaita, New Georgia, Ontong Java, Rennell, San Cristobal, Santa Cruz, Santa Isabel, Savo, Shortland islands. Area, 11,500 sq. mi.; population, about 100,000. Governed by a high commissioner. Exports copra, trochus shell and gold. Capital, Honiara.

Pitcairn Island Colony

Includes Henderson, Ducie and Oeno islands (uninhabited). Pitcairn Island alone, area, 2 sq. mi.; population, 125. Administered by governor of Fiji through an elected council.

New Hebrides Condominium

In Melanesia. Main islands: Espiritu Santo, Malekula, Ambrym, Epi, Efate, Erromanga and Tanna; total area, 5,700 sq. mi.; population, 52,000. Governed jointly by British and French. Exports copra, cacao, coffee. Capital, Vila, on Efate.

Starbuck, Malden, Flint, Caroline and Vostock

Islands between 150° 14' and 155° 52' W. longitude.

AUSTRALIA (see also New Guinea)

Norfolk Island, 930 mi. northeast of Sydney; area, 13 sq. mi.; population, 1,200; Territory of Ashmore and Cartier Islands; Cocos (or Keeling) Islands, 800 mi. southwest of Singapore; area, 1.5 sq. mi.

NEW ZEALAND

Cook Islands

In Polynesia. Main islands: Rarotonga, Aitutaki, Mangaia, Atiu. Area, 84 sq. mi.; population, 15,600. Governed by resident commissioner and legislative council. Exports citrus fruits, mother-of-pearl, copra.

Niue (Savage) Island

In Cook group but administered separately. Area, 100 sq. mi.; population, 4,700. Copra.

Tokelau (Union) Islands

In Polynesia. Atafu, Nukunono and Fakaofa atolls 300 mi. north of Western Samoa. Area, 4 sq. mi.; population, 1,800.

FRANCE

New Caledonia and Dependencies

Overseas territory including New Caledonia, Loyalty Islands, Isle of Pines, Wallis Archipelago, Futuna and Alofi. In Melanesia. Total area, 9,401 sq. mi.; population, 65,500. Governed by high commissioner assisted by a privy council and council general. Industries: farming, mining, manufacturing. Produces nickel, chromium, coffee, copra. Nouméa, capital, 10,500.

French Establishments in Oceania

Scattered islands in Polynesia administered by a governor, privy council and representative assembly. Includes Society Islands (largest, Tahiti, Moorea), Marquesas, Tuamotu, Leeward, Tubuai (Austral) groups; Rapa; Gambier Islands. Area, 1,520 sq. mi.; population, 55,700. Exports copra, phosphate, mother-of-pearl, tropical fruits. Papeete, capital, on Tahiti, 12,400.

UNITED STATES (see also Hawaiian Islands)

American Samoa

In Polynesia. Includes Tutuila, Aunuu, 3 islands in Manua group and Swains and Rose islands. Area, 76 sq. mi.; population, 18,900. Administered by a civil governor under Department of the Interior. Sons of chiefs are trained at the Feleti School. Chief town, Pago Pago.

Guam

In Micronesia, in the Marianas Archipelago. Unincorporated territory, administered by a governor and a unicameral legislature responsible to Department of the Interior. Total area, 225 sq. mi.; population, 59,500. Capital, Agaña. Apra Harbor is the only good port.

UNITED NATIONS TRUSTEESHIPS

Nauru, south of equator, 2,200 mi. northeast of Sydney. Area, 8 sq. mi.; population, 3,200. Trusteeship held jointly by Britain, Australia and New Zealand, administered by Australia. Produces phosphate.

Western Samoa, includes Savaii, Upolu, Manono and Apolima islands. Administered by New Zealand with a council of state and a legislative assembly. Area, 1,130 sq. mi.; population, 92,000. Exports copra, cacao, bananas. Chief town, Apia, on Upolu.

Caroline, Marianas and Marshall groups, in Micronesia. Area, 829.7 sq. mi.; population, 58,000. Administered by the U. S. Produce cotton, copra.



C. W. COLLINSON

AN ISLAND CHIEF in the Solomons wears with pride a necklace of porpoise, shark and dog teeth and upon his head a polished disk of tortoise shell. Arm bands and belt have colorful designs.



H. J. SHEPSTONE

SOLOMON ISLANDERS decorate their high-prowed war canoes with iridescent mother-of-pearl and cowry shells. The carved figurehead at the top is designed to ward off danger.

Philippine Islands

... republic of the Filipinos

THE Philippine Republic has not escaped the troubles that seem to plague all the young Asian democracies. Soon after its declaration of independence, on July 4, 1946, the Government was faced with a communist rebellion. The Huks, underground fighters against the Japanese in World War II, rose up in considerable strength. Not until 1954 were they effectively subdued.

Almost every election in the Republic erupts in either physical violence or angry charges by the losers of ballot forgery. In 1951, for example, a member of the defeated Nationalist Party complained that "in . . . my own province, my father, who died in 1937, rose up to vote the straight Liberal Party ticket, and although I was running here in Manila, I later found out that I also had voted down there." The election of Ramon Magsaysay as president in 1953 ended such charges for a time. But he had been in office only three years when he died, tragically, in a plane crash.

The United States, meanwhile, has been watching over its former colony with active concern. The Philippines were acquired from Spain for \$20,000,000 in 1898 as a result of the Spanish-American War. In 1934, the United States Congress changed the status of the islands to that of a commonwealth and promised independence by 1946. The promise was kept but the United States did not thereby lose interest in the islands. Some \$2,000,000,000 in American aid flowed into the fledgling republic during the years immediately after 1946.

By 1950, however, then Secretary of State Dean Acheson was lamenting that the money had not been used "as wisely as could be wished." In that same year,

the Bell Commission, appointed by President Truman, brought out the issue of corruption in the Philippines. It recommended further financial aid but only if the Philippine Government would institute various economic reforms. The Filipinos were critical of the Bell Report, and have yet to comply with all of its suggestions. American aid has continued, however, in the form of loans from the Development Loan Fund.

Such episodes, together with other grievances, have strained American-Filipino relations. The differences reached a head during the late 1950's in a controversy over American military bases in the islands, some of which are quite large. The United States Navy's air installation there is the largest such American base on foreign soil. The leases, signed in 1947, granted the necessary land to the United States for a period of ninety-nine years. In 1956, however, the Philippine Congress demanded both shorter leases and more authority in the base areas. Painful negotiations between the two countries followed.

Happily, in 1959 an amicable agreement was reached. The United States limited its leases to twenty-five years and gave up seventeen military reservations. In exchange the Philippine Government yielded control of certain areas as "integral parts of adjoining bases." A United States-Philippine Mutual Defense Board was also set up, making defense policy in the islands a joint venture. Barring unusual clumsiness on one side or the other, there is no reason why this arrangement should not work out well. The Filipinos are the first to admit that they are incapable of defending their homeland alone. It was at Manila, for example, that the Southeast Asia Collective Defense Treaty (SEATO) was signed. This links the Philippines not only with the United States but also with Australia, France, New Zealand, Pakistan, Thailand and the United Kingdom.

There still remains the matter of America's friendly attitude toward Japan, which has annoyed the Filipinos for

some time. No other nation suffered more slaughter and devastation at Japanese hands in World War II, and memories of this sort are slow in fading. Not even the good-will trip of Japanese Premier Kishi to the islands in 1957 or the agreement on reparations a year later soothed Filipino feelings. Most of all, the Filipinos fear that Japan, backed by American aid and investment, will achieve commercial supremacy in the Far East. Philippine leaders have frequently charged that America is favoring not its allies of World War II but its enemies.

The Philippine economy itself has been the beneficiary of considerable outside

aid, of course. Australia, Japan and the World Bank, as well as the United States, have extended help in the form of loans and credit. The islands have always had considerable economic resources but lacked the industrial facilities to develop them. As the years roll on, however, the Filipinos seem to be moving closer and closer to full use of their splendid resources.

Like a pendulum a thousand miles long, the islands that make up the Philippine Republic swing down through the Pacific from Taiwan to Borneo. With a total area of 115,707 square miles, they have more land surface than Great Britain and twice as much as Greece. The

JOHN LAUNDIS. BLACK STAR



TERRACES planted to rice, the staple food of the islands, loom above a small farming village. About half of the Philippines' cultivated land is devoted to rice.

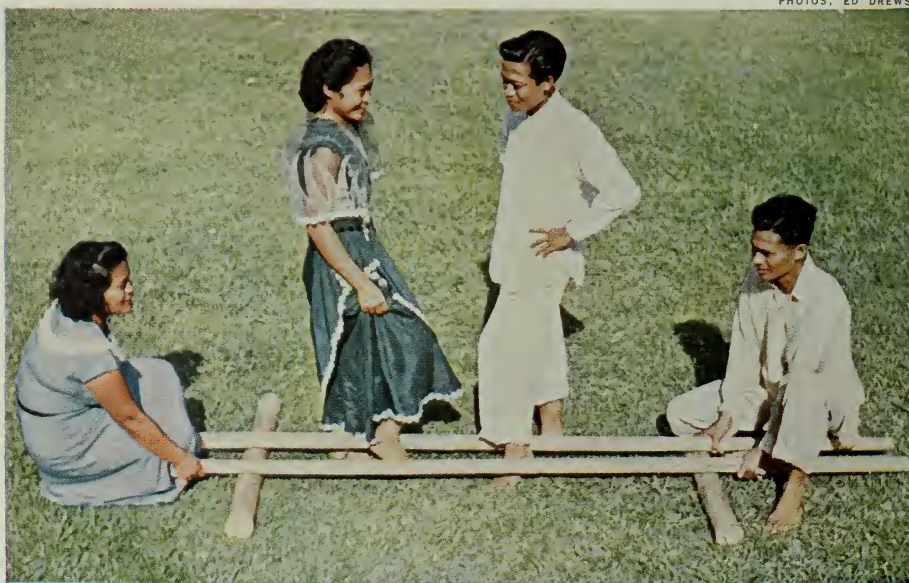
HARVESTING PINEAPPLES is no easy task. The worker's hands and arms are protected against the razor-sharp leaves and prickly fruit.



UNDER A HUGE HAT, made of rattan, an elderly woman fondly cuddles her grandson. The family is the center of the Filipinos' social life.

THE TINIKLING, a folk dance. The barefoot performers nimbly hop and skip, like *tiniklings* (jumping birds), over two bamboo poles. At the same time the poles are clapped in time to guitar music.

PHOTOS, ED DREWS





EWING KRAININ

A MORO BOAT in the waters off Mindanao. It is being wafted along by a variation of the lateen sail, the favorite sail of Muslims, such as the Moros.

NARRA LOGS. The sturdy narra is the national tree of the Republic. In world markets, its handsome wood is known as "Philippine mahogany."

ED DREWS



PHILIPPINE ISLANDS



largest island, Luzon, is almost the size of Newfoundland. Mindanao, the second largest island, is as big as Indiana.

The whole coast line of the archipelago, with its myriad bays and gulfs, is longer than that of the United States. There are lovely coves and excellent natural harbors. Mountains ridge the islands, and there are countless rivers and lakes in the vales between the ranges. Highest of the peaks is Mount Apo, 9,690 feet, a dormant volcano in Mindanao. And, incidentally, one of the greatest ocean depths, the Mindanao (or Philippine) Trench, is on the eastern margin of the Philippines. Extending more than 34,000 feet below sea level, it would more than submerge Mount Everest, the world's highest mountain.

Natural Resources

Considering the productive soil the Philippines are "among the richest lands on earth." The Filipinos are basically an agricultural people. About 80 per cent of them live by farming. The greatest crop is rice, the people's staple food. The central plain of Luzon, in fact, is considered the "rice granary of the Philippines" and one of Asia's rice bowls. North of this plain is the Cagayan Valley, the greatest tobacco-producing area in Asia and the source of the famous Manila cigar. The Bicol Peninsula in Luzon and Davao Province in Mindanao are the world's most important hemp-producing regions, supplying the renowned Manila hemp. On the cool, breezy plateaus of Benguet (in Luzon) and Bukidnon (in Mindanao) some temperate-zone products, such as apples, apricots, California oranges, grapes, pears and spinach, are cultivated with notable success. The Philippines also rank first in world production of hemp and coconuts, second in sugar cane, fourth in lumber and seventh in tobacco.

Practically all minerals known to man are found in the Philippines. Mining is one of the ancient industries of the Filipinos. It was flourishing even before Europeans first came to the Far East. More gold is produced than in any other

country in southeast Asia. The iron-ore resources of Mindanao are estimated at one billion tons and are regarded as "one of the richest undeveloped deposits in the world." In the island of Leyte there is a wealth of asphalt—some ten billion metric tons, more than enough to asphalt all the roads of Asia. Other minerals, such as silver, copper, oil, manganese, cement, coal, chromite and tin, are also found in abundance.

More than half the land is covered with forests, which are capable of producing about one-half billion board feet of timber. No less than three thousand species of trees are found in Philippine forests. Most famous of these is the narra (*Lingoum indicum*), known the world over as "Philippine mahogany," though it is not true mahogany.

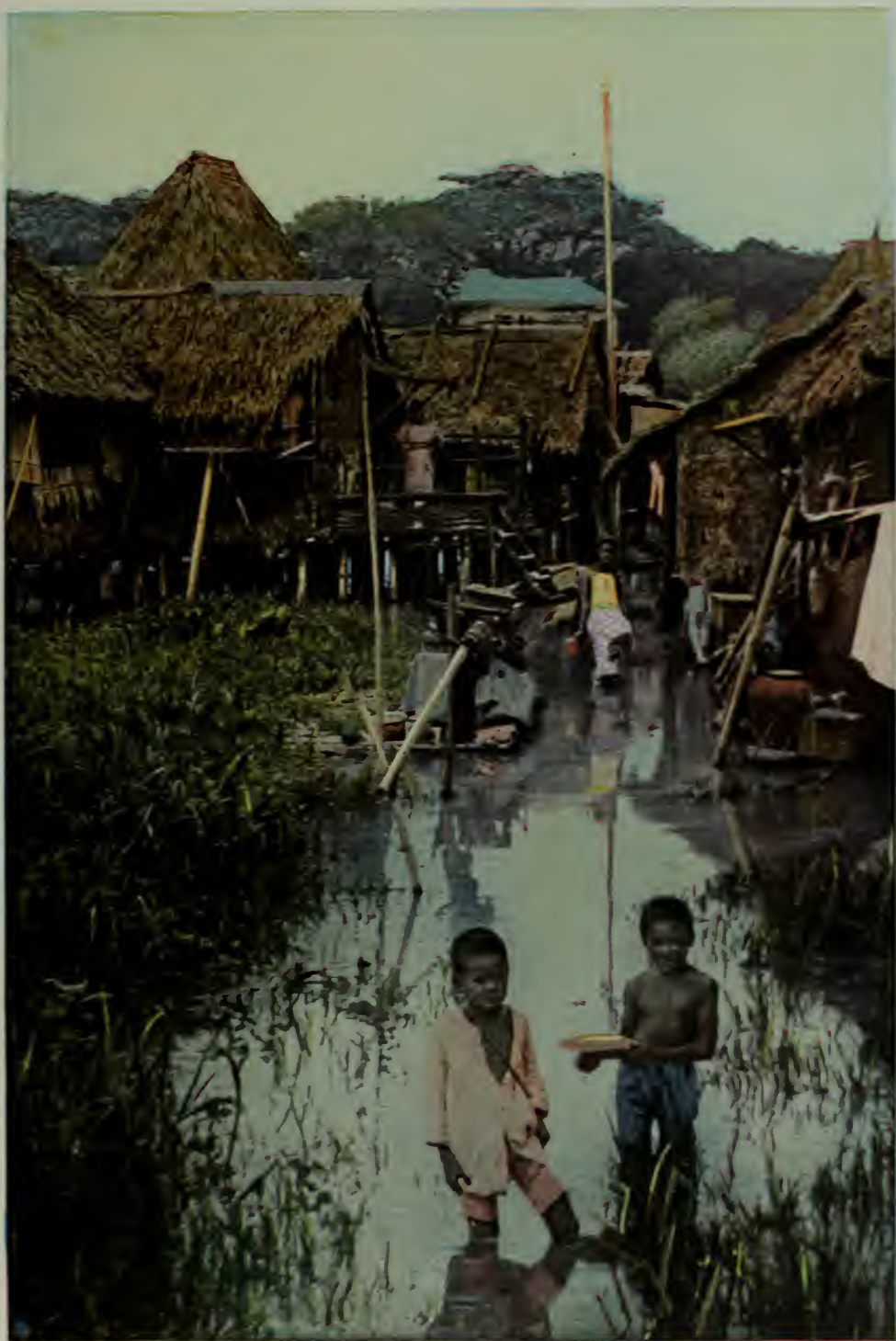
No other archipelago in the world contains such plant wealth as does the Philippines. According to botanists, there are ten thousand species of ferns and flowering plants in the country. The queen of the Philippine flowers, and the national flower, is the sampaguita (*Jasminum sambac*). It is a tiny, snow-white, star-shaped blossom with a lingering fragrance. To the Filipinos, it is a symbol of love, youth and friendship. Dark-eyed *dalagas* (young women) often tuck these flowers in their soft black hair or wear them as a *lei* around their lovely necks. According to Filipino tradition, a *binata* (young man) who is too timid to express his love to a girl may send her a sampaguita garland, especially on the eve of a dance. If she wears it, he has reason to hope; but if she doesn't, he had better look for another sweetheart.

Other floral beauties of the Philippines are the radiant *cadena de amor* (chain of love), the intriguing *dama de noche* (lady of the night), the flaming *dap-dap* (fire tree), the fragrant *camuning*, the queenly *camia*, the sweet *ilang-ilang*.

According to botanical authorities, the Philippines have the richest collection of orchids in the world, reaching nearly one thousand species. Many Philippine orchids are extremely rare and are never found in other countries. Of all the



BAMBOO is the most useful grass. It is of many kinds; some varieties grow to be thirty or more feet high. Of it a Filipino can build a comfortable house from foundation to ridge—posts, stairway, floor, partitions, windows, rafters, roof. The roof of a bamboo house is usually, though not always, built of the leaves of the nipa palm or of reeds.



UNDERWOOD & UNDERWOOD

HOUSES ON PILES are the usual thing in the Philippines, for they are more sanitary and, in times of high water, essential to comfort. These houses are dry although the river has overflowed the site of the village. Many of the houses in the hills also stand on piles, high above the ground, following the old custom. Elsewhere there are more modern dwellings.

orchids, the waling-waling (*Vanda sandariana*) is unsurpassed in loveliness and grace. It was discovered in 1881, blooming wild in the jungles of Mindanao.

The Philippines teem with an abundance of animal life. There are 750 species of birds in the archipelago, more than the number in Australia, China, Japan, Indonesia or Hawaii. The insect population is vast, with some 25,000 species. Of special interest to scientists are 3 Philippine animals—the mouse deer, the smallest deer known; the tarsier, the smallest monkey in the world; and the tamaraw, a unique animal that looks like a dwarf buffalo and is found only in the islands.

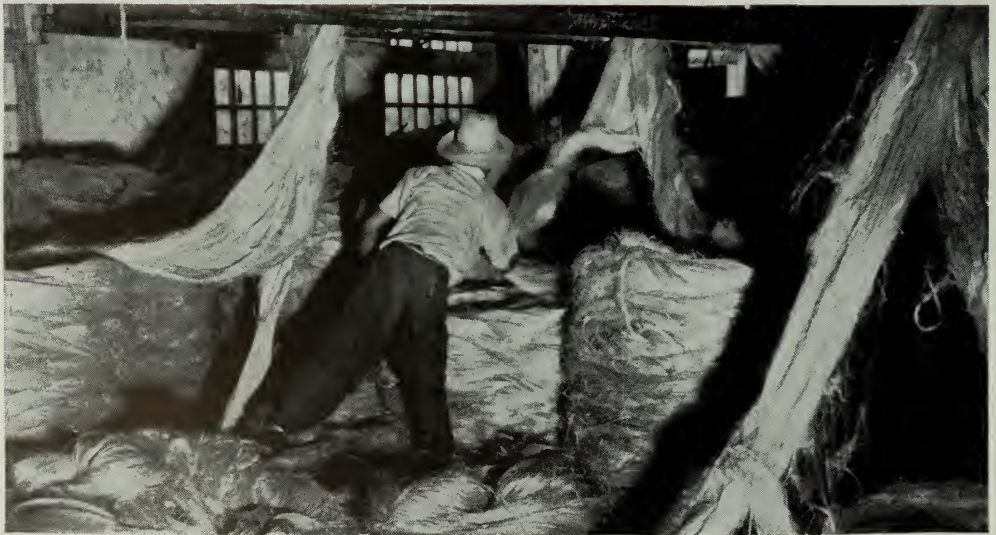
Because of its usefulness, the ponderous, powerful carabao (water buffalo) is the favorite animal of the Filipinos. It draws the plow in the rice paddies, pulls *carretons* (bull-carts) and drags logs. Its meat and milk are the farmers' food, and its tough hide is highly prized as leather. Even the animal's horns are carved into decorative household fixtures and used for the handles of bolos (chopping knives).

A favorite sport in the barrios (villages) during the annual fiestas is the

carabao fight or carabao race. A carabao is ordinarily a patient and well-behaved animal. But, when roused to anger, it can gallop as furiously as a stampeded Texas longhorn or fight like a Bengal tiger.

Anglers of all nations consider the Philippines a fisherman's paradise. Lakes, rivers and surrounding seas abound with more than two thousand kinds of fish. Manila Bay, Pangasinan's Lingayen Gulf, Laguna de Bay and Palawan's Malampaya Sound are excellent fishing grounds. Most delicious of the Philippine fishes, according to gourmets, is the lapu-lapu, whose flavor is worthy of a king's palate.

It is no "fish story" that the largest and smallest fish in the world are found in Manila Bay. The mammoth *Rhincodon typus* is more than fifty feet long and is called *pating bulik* (striped whale) by Filipino fishermen. The tiny *Pandaka pygmaea* is 11.5 millimeters—less than a half inch—long. This is about three millimeters smaller than the sinarapan (*Mistichthys luzonensis*) of Lake Buhi, Camarines Sur (southeast Luzon province), which authorities once believed to be the world's smallest fish.



EWING GALLOWAY

MANILA HEMP, in bundles and hanks, awaits shipment. The fibers are obtained from the stalks of abaca plants, which are stripped. Manila hemp is made into rope and twine.



AMERICAN PRESIDENT LINES

CARABAO CARTS amble leisurely along a road near Manila. The carabao, or water buffalo, is a useful draft animal. With its splay feet, it can wade through swamps easily.

Everywhere one looks in the lovely islands, there are breath-taking vistas: towering mountains; mist-capped volcanoes canopied by azure skies; rolling valleys carpeted with coconut groves, or fields of rice, sugar cane, tobacco; meandering rivers bordered by swaying bamboos and flowering plants; foaming waterfalls; sparkling lakes; sandy beaches awash with the eternal surge of the tides; and sapphire seas dancing to the rhythm of Oriental breezes.

A two-hour drive south from Manila takes the visitor past the century-old Bamboo Organ of Las Piñas, the only organ of its kind in the world; the quaint lake-shore town of Calamba, birthplace of Jose Rizal, national hero of the Philippines; and the hot springs of Los Baños, one of Asia's famous spas. The goal of this trip is the two-hundred-foot-high Pagsanjan Falls.

In southeast Luzon is Mount Mayon, the only volcano on earth with a perfect cone. The best time to see it is at sun-

rise when its brooding summit is garlanded with gossamer mists and its graceful slopes scintillate in dark green and pale gold.

About 180 miles north of Manila is the beautiful, cool, pine-clad city of Baguio, famous summer resort of the Philippines. Nestling on a scenic plateau, 5,000 feet above sea level, the town has a temperate climate, its bracing mountain air scented with the aroma of moss, pines and strawberries. In March and April, thousands of people trek up to Baguio to escape the lowland heat and to enjoy the mountain breezes and romantic vistas. Going by car, one has the added thrill of a zigzag road.

Not far from Baguio are the world-renowned Ifugao rice terraces, which were built two thousand years ago on the massive slopes of the high Sierras by the ancient Ifugaos. The terraces are a marvelous feat of engineering, as amazing as the Inca temples of Peru and as colossal as the Pyramids of Egypt. They are



BETTY PARSONS GALLERY

A MARKED DEPARTURE from traditional religious architecture is evident in this modern church of the Philippines. Even the mosaic holy figures are modern in form and dress.

a soul-inspiring sight, for they rise like a giant's staircase into the clouds. If placed end to end, they would extend over twelve thousand miles, enough to embrace one half the earth's circumference.

It is said that the sunsets that flame over Manila Bay are without peer in any part of the world. At twilight the Luneta esplanade along the shore of the bay is thronged with people who come simply to see the magnificent display. As the sun sinks toward the horizon, the western sky is a blazing banner of scarlet, crimson, yellow, purple, and the rippling waters below seem liquid gold. Floating on the air comes the sound of church bells tolling the Angelus. Then, as night approaches, over the distant skyline of Cavite looms what appears to be the silhouette of a woman reclining on rocks. According to Filipino legend, this is the figure of a beautiful woman of long ago. Every twilight she waits for her lover, the sun god, who always returns to her after

his day's journey across the sky.

Manila is one of Asia's great cities. It was once the Mohammedan kingdom of a Rajah Soliman, a dashing Filipino warrior-king. In 1571 it was captured by the Spanish conquistador Legazpi, who rebuilt it and made it a Christian city.

Manila Bay is the finest harbor in the Far East. At its entrance, standing like a lone sentinel, is the rocky island-fortress of Corregidor. Opposite this island to the east, just across a narrow strip of water, is the peninsula of Bataan. Here, during World War II, the Filipino-American forces made a gallant stand against Japan's invading hordes, upsetting the enemy timetable and thus probably saving Australia.

Manila is a gay, hospitable metropolis, where East and West meet and blend in picturesque harmony. Wafted on the soft moist air of the tropics are the blended aromas of Malaysia, Europe and America. Along asphalt streets and ce-

ment boulevards, past modern office buildings, flash streamlined cars and taxis.

Near the historic Luneta—today a large park—where many Filipino heroes died at the hands of Spain's executioners, are the ruins of Intramuros. Once upon a time this section of present-day Manila was a medieval Spanish city. Within its walls were the massive Manila Cathedral, the imposing *Ayuntamiento* (city hall), a number of handsome church buildings, schools and colleges, and monasteries of various religious orders. Fort Santiago formed the oldest portion of the walls, and there were drawbridges and an ancient moat. Now Intramuros is a huge pile of charred ruins, a woeful memento of the second World War. A stone's throw from the crumpled walls stands an elegant classic structure, the Capitol. This is where the Congress of the Philippines holds its sessions. It is one of the beautiful buildings that have arisen over the ashes left by war.

Manila's Busy Shopping Center

Across the Pasig River from the Intramuros ruins is the Escolta, the famous business thoroughfare of Manila. On either side are banks, soda fountains, movie houses, office buildings, cigar-and-magazine stands. In the department stores one can buy anything from American lipsticks to Parisian gowns. At night the Escolta is bright with colorful billboards that advertise automobiles and soft drinks, in neon lights.

The streets of Manila present a daily cavalcade of people of all nations: swarthy, bearded, sad-eyed Indian peddlers; chocolate-hued, sarong-draped, fez-wearing Mohammedans from Indonesia; brown-complexioned, slender, carefree Filipinos; yellow-hued, almond-eyed, ubiquitous Chinese tradesmen; Negro sailors; dark-eyed Spanish *señoritas*; blond French *mademoiselles*; mustached German scientists; dapper Italian artists; aristocratic English bankers, blue-eyed Irish missionaries; pink-cheeked Swiss girls; and sun-tanned American old-timers. To some, the city is home.

Manila is a city of universities, a fact in which the Filipinos take great pride. There are twelve universities within Manila's territorial limits. No other city on earth, not even New York or London, has so many. The oldest of the Manila universities is the University of Santo Tomas (founded in 1616), which is 25 years older than Harvard University. The biggest is Far Eastern University (founded in 1933), whose total enrollment of 21,000 makes it the largest of any university in Asia.

One of the historic landmarks in Manila is the palatial Malacañang. In earlier days it was the residence of Spanish governors and then of American governors general. Today it is the official residence of the president of the Philippines. It is on the north bank of the Pasig and is surrounded by spacious gardens and shady tropical trees. Anyone, from barefooted farmer to distinguished diplomat is welcome to enter the Malacañang grounds.

To know the Philippines, one must also visit the other islands, their cities and towns. A leisurely trip by steamer during the summer is a delightful experience, for then the seas are calm and smooth, the days sunny and the nights starry. One can see the famous hemp plantations of



UNATIONS

A READING CENTER, for workers and their children, in an industrial suburb of Manila.

Luzon basking within the shadow of Mount Mayon; the romantic Strait of San Juanico, between Samar and Leyte islands, which is reputed to be the narrowest strait in the world; rustic fishing villages dotting the island shores; the lonely islet of Limasawa, where the first Christian Mass on Philippine soil was celebrated by a priest with the Magellan expedition, on Easter Sunday, March 31, 1521; historic Cebu, the oldest city in the Philippines (founded by Legazpi in 1565) and charmingly called the "Empire City of the Visayas"; fascinating Iloilo, the "Queen City of the South"; opulent Bacolod, the "Sugar City of the Philippines"; gay Davao, the "Hemp Metropolis of the South"; fabulous Jolo, ancient capital of the Moslem Sultanate of Sulu; and colorful Zamboanga, the "Pearl of the Southern Seas."

Nowhere else in Asia are white people welcomed with as sincere friendship and warm hospitality as in the Philippines. The Filipinos, unlike many other Asiatic nations, cherish no bitter memories of Western exploitation. To Spain, which ruled their country for over three centuries, they are eternally grateful for their Christian religion, their Spanish language and literature and their social customs. To the United States, which tutored them for four decades, they also have a lasting affection because of the invaluable things they now enjoy—democracy, popular education, the English language, and the American way of life.

Links with Western Civilization

Of all the Asiatic peoples, the Filipinos have the unique distinction of being well understood by Westerners and decidedly misunderstood by their Eastern brothers. There are several reasons for this. For one thing, the Filipinos are the only Christian nation in the Far East. They are also the only Asiatic people to have absorbed Western civilization to any high degree. Moreover, they form the only English-speaking nation in all Asia, and they are the most Americanized people in the Asiatic world.

More than 90 per cent of the Philip-

pine people are Christians. Of these Christian Filipinos, more than 80 per cent are Catholics. A Filipino is, by nature, religious. The pageantry of the Church rituals and its colorful fiestas satisfy something in his spirit.

Every *barrio* (village), town and city in the Philippines has its own patron saint, whose feast day is celebrated with pomp and ceremony. Since there are 25 cities, 1,000 towns and 18,000 *barrios* in the archipelago, it must be apparent that there are thousands of fiestas during the year. Indeed, no day passes without a fiesta somewhere in the Philippines.

Open House during Fiestas

The Filipinos are at their happiest mood during a fiesta. To them, it means a relaxation from the monotony of farm or factory labor, a time to laugh, to dance, to make merry. Many of their most picturesque customs center around the fiestas. During the town fiesta, for instance, every house is practically a public restaurant. Everybody, native or foreigner, is welcome; and an unwritten law of Filipino hospitality dictates that a visitor must eat in every house at which he stops.

At fiesta time, the wealthier citizens give dances in their homes for young people. Adding to the joyous clamor of the day, the streets echo with the thunderous blare of brass bands or to gay tunes of *musikong buho* (musicians using bamboo musical instruments). There is sure to be a *pintakasi* (cock fight) somewhere for the older people. But when the Angelus sounds, which closes the religious ceremonies of the fiesta, a solemn and impressive procession winds around the town. Thousands of devotees march slowly, carrying lighted candles. Trailing them is a carriage bearing the image of the patron saint, accompanied by the town priest, prominent citizens and the brass bands. After the procession come the fireworks and the traditional *moro-moro*, a blood-and-thunder drama staged at the town plaza. The *moro-moro* re-enacts the old wars between the Christians and the Mohammedans (Moros).

PEARLS OF THE ORIENT

Children quickly find their way to the *feria* (fair), set up around the church. There are *choviros* (merry-go-rounds), Ferris wheels, shooting galleries and all the other delights of a carnival.

During a *fiesta* the Filipino farmer, who goes barefooted the rest of the year, wears shoes and puts on his best *barong tagalog* (the national costume for men). It is generally made of pina cloth (from pineapple fiber), a silklike material that is soft and translucent. In cut, it looks like a sports shirt except that it has a starched collar, embroidered shirt panel and long sleeves with cuffs. It is worn outside the trousers. Men of the wealthy and middle-class families wear a *barong tagalog*

of finer and costlier materials, notably ramie, with genuine pearls or diamonds as buttons, and gold cuff links.

The gala-dress for country women, the *balintawak*, is equally distinctive. It is a two-piece dress consisting of a *camisa* (upper part) and a *saya* (lower part). The *camisa* is made of *sinamay* (hemp fiber) dyed in gorgeous colors, with ruffled fanlike pieces which fit over the shoulders like butterfly wings. The *saya* is a colored cotton skirt, reaching to the feet. To complete the costume, the woman carries a folded scarf on her shoulder and wears a pair of beautifully carved *bakya* (wooden clogs) or fancifully embroidered *zapatilla* (slippers).

AN ICE-CREAM SODA, a Swiss watch, a Paris gown—you can buy almost anything in the shops along the Escolta in Manila. The thoroughfare is the heart of the city's business section.



Well-to-do Filipino women also wear, aside from the *balintawak*, another national costume, the *mestiza terno* (half-breed dress). It shows Spanish influence and is worn on formal occasions, such as receptions, weddings, balls. The gown has ruffled wing pieces (as in the *balintawak*) and its skirt tapers gracefully into a fanlike skirt that touches the floor (longer than the *balintawak* skirt). Sometimes it is worn with a *pañuelo*, which is a stiffly starched piece of cloth folded into a triangle and arranged around the shoulders as a scarf. A beautiful Spanish fan, elegant slippers and even diamond earrings, rings, pendants and other ornaments may complete the *mestiza terno*.

Hats are seldom worn by Filipino men and never by women. Any woman who wears a hat, either in Manila or in the provinces, is immediately recognized as a visitor.

Maytime is the most delightful season in the Philippines. It is the season of flowers, of the merriest festivals, of romance. Then all the flowers, including the sampaguita, are in full bloom throughout the archipelago. Days are warm, inviting families to picnic by a river or at the seashore. Swimming pools and bay-

side resorts are jammed with joyous bathers. Nights, however, are pleasantly cool, with a romantic feeling in the air amid the fragrance of blooming flowers.

It is on May nights that the cities and towns of the Philippines enjoy the festival spectacles of the *Flores de Mayo* and the *Santacruzán*. The performers in the *Flores de Mayo* are all girls, the prettiest ones in town, from the ages of seven to twenty-one. Their leader is the *Reina de las Flores* (Queen of the Flowers). The girls carry garlands of flowers on a procession around the town, which ends at the church. There they offer the flowers of May to the image of the Virgin Mary, whom they also call the "Queen of Heaven" and "Patroness of Flowers."

Evening Procession in Candlelight

The *Santacruzán* is a mixed affair, with boys and girls participating. The young people march with lighted candles, singing the hymn "*Dios te salve, María*." At the head of the procession is a big black cross, borne by a husky boy. Between the two files of singers the chief characters of the spectacle move in a single file—*Infanta Judith*, *Reina Sentenciada* (condemned Queen), *Reina Ester* (Queen Esther), *Reina de las Flores* (Queen of Flowers) and *Reina Helena* (Queen Helen)—and their respective *sagalas* (ladies in waiting). The queens are the chosen beauties of the town or from elsewhere, and the loveliest among them is the *Reina Helena*. A boy-king, Constantine, marches by the side of the *Reina Helena*. Like the *Flores de Mayo* the *Santacruzán* is celebrated more as a social festival than as a religious ceremony. It does, however, commemorate the recovery of the Holy Cross (*Santa Cruz*) by Empress Helen (mother of Constantine) of the Byzantine Empire. The procession ends at the house of the *hermano* and *hermana* (the "stage managers" of the spectacle), where all the performers and the public as well are entertained with a supper. A *rondalla* (band of guitar players) furnishes music.

The Filipinos take great pride in being the only English-speaking people in

CORREGIDOR, fortress island near Manila. It was the scene of desperate fighting, 1942.

WIDE WORLD



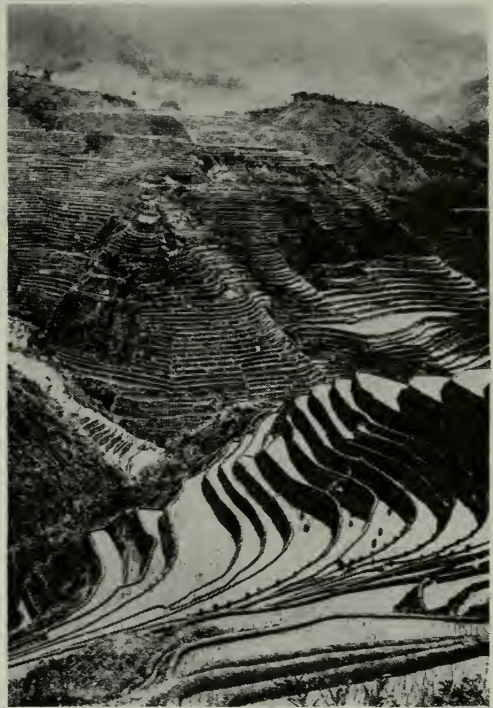
Asia. They have their own national language—Filipino; but this is really the Tagalog tongue. Though Tagalog must be taught in all schools, it is not yet spoken throughout the archipelago. English is the language most commonly used by the people in all parts of the Philippines. A peasant boy in a remote barrio, a boot-black in Manila, a forest ranger in the jungles of Mindanao and a magistrate of the Supreme Court—all speak English. Any English-speaking visitor can go to any of the islands without an interpreter and can talk directly with the people and feel at home. Aside from English, educated Filipinos also know another world language—Spanish. This second foreign language is the social language of the Philippines, necessary for easy conversation on formal occasions.

The Filipinos have a natural gift for languages. An average Filipino can learn any language under the sun with great ease. Such linguistic prowess is sharpened by environment. The Philippines are virtually a babel of tongues, for there are more than eighty-seven native dialects in the islands. So every Filipino is, by necessity, polyglot. It is quite usual for a Filipino to speak English, Spanish, Tagalog and several dialects.

Musical Talent, Filipino Birthright

Another outstanding trait of the Filipinos is their talent for music. They are born musicians. As the gift of tongues is in their brains, so is poetry in their hearts and music in their blood. Although the Filipinos have been influenced by the music of Spain and America, they still keep the musical lore of their Asiatic ancestors. In school programs and in public concerts, they dance the folk dances and sing the folk songs of old Malaysia with the same grace and fervor as the bygone troubadours of their storied past.

Sweetest of their ancestral songs is the *Kundiman*, the greatest of Filipino love songs. It is a tenderly haunting refrain. On moonlit nights, especially in the villages, young men still carry out the custom of the serenade. Accompanied by friends



UNDERWOOD & UNDERWOOD

IFUGAO RICE TERRACES, on Luzon. The Ifugaos are skilled irrigation engineers.

—one is certain to be a guitarist—the suitor stands below the bamboo window of the girl's house and sings the *Kundiman*. As the song breaks the silence of the night, the sleeping girl awakens. Then she may appear at the window and listen with enraptured attention to the boy. The song over, she thanks him with a smile and bids everybody farewell —“*magandang gabi*” (good night). The happy young man and his friends then sing again and go away. It can also happen that no matter how many songs the young man may offer during the *harana* (serenade), the girl refuses to appear. Then the serenaders depart in silence, forlorn.

Of the numerous folk dances of the Philippines, the *Tinikling* is the most popular. The young man and woman are both barefooted and garbed in colorful native dress. They nimbly hop and skip over two bamboo poles, which are clapped, like *tiniklings* (jumping birds). Besides

the trumpeting clap of the bamboos, the dance is accompanied by the tinkling music of a guitar. It is an amazing display of agility and perfect harmony between melody and action.

Like their brother Asiatics, the Filipinos are hardy and brave, inclined to accept both weal and woe without complaint, patient and self-sacrificing. Their family ties are close and they love children.

However, emphatically unlike their Asiatic neighbors, the Filipinos have the highest regard for womanhood. Nowhere else in all Asia do women occupy such a high position in society or such a cherished place in the hearts of their families. Politically, socially and economically, they are the equal of men. They were the first among Asiatic women to enjoy the right to vote; to be elected to Congress and other government offices; to be appointed to the president's cabinet and to administrative, judicial and diplomatic posts; to study in universities and graduate in law, engineering, medicine, education, liberal arts, architecture and dentistry. Socially also, they are on an equal plane with men.

Woman has never been used as a beast of burden nor degraded in other ways in the Philippines. Almost all Filipinos are Catholics, and marriage is for life. Ac-

cording to tradition and by law, the Filipino woman is her husband's partner, in rags or riches; the family treasurer who supervises the household finances and has a voice in all matters affecting the family welfare; first teacher of the children, who learn their prayers and the alphabet on her lap; and the loving queen of the home she reigns over and governs.

Among the younger generation of Filipino women, notably the high-school and college girls, Western influences are evident, both good and bad. The girls are alert and independent. In clothes and grooming, they could hardly be distinguished from the young women of North America.

Most nostalgic of the Filipino customs and the one that illustrates their finest traditions is the ritual of parting. A boy in the provinces, setting off for college, perhaps in Manila, reverently kisses the hands of his parents as an expression of love and respect. The parents bless him and remind him to study hard, to remember his bedtime prayers and to write home. There is no kissing on lips or cheeks. Even farewell kissing in public between sweethearts or between husband and wife is considered in poor taste. Only a last handshake, a farewell salute, a few



EWING GALLOWAY

CIRCULAR RAFTS heaped with coconuts drift downriver. It is a very easy way to get coconuts to market as on placid streams the rafts float with the current or they can be towed.

tears for the bitter-sweetness of good-by are acceptable with good grace.

A foreigner leaving the Philippine shores is escorted by his Filipino friends to the airport or the ship. Before he departs, they smilingly place a sampaguita lei around his neck, load him with gifts and shake his hand. Then they affectionately bid him: "*Mabuhay!*"—a farewell greeting similar to Spain's *Adios*, Japan's *Banzai*, Mexico's *Vaya con Dios* and Hawaii's *Aloha Oe*. As they watch the plane zooming into the azure skies or the ship sailing toward the horizon, they wave their handkerchiefs and pray, deep in their hearts, for his good health—and *bon voyage*.

GREGORIO F. ZAIDE



UNATIONS

NEW POTS, fresh from an open kiln. The Government trains villagers in pottery making.

PHILIPPINE REPUBLIC: FACTS AND FIGURES

THE COUNTRY

The largest group in the north Malay Archipelago; composed of about 7,100 islands and islets. Only 2,440 of them are named, and there are only 462 with areas of one or more square miles. Bounded on the north by the Bashi Channel; on the east by the Philippine Sea; on the south by the Celebes Sea; on the west by the South China Sea. The total land area is about 114,830 square miles; the two largest islands are Luzon (40,420 square miles) and Mindanao (36,537). The estimated total population is 21,039,200.

GOVERNMENT

Formerly an insular possession of the U. S., the area became an independent republic in 1946. It has a constitutional form of government, with a president and a vice-president elected for a 4-year term; both may be re-elected. The president is assisted by 10 departmental secretaries. There is a two-house Legislature composed of a Senate, with 24 members elected for 6 years, and a House of Representatives, with membership not to exceed 120, elected for 4 years. All over 21 may vote if they can read and write Spanish, English or a native dialect and if they meet certain residential qualifications.

COMMERCE AND INDUSTRIES

Agriculture is the chief industry; principal products—rice, Manila hemp, coconuts, sugar cane, corn, tobacco, maguey, pineapples. Government owns more than 90% of the commercial forests furnishing timber, gums, resins, vegetable oils, bamboo, tan and dye barks. Livestock includes hogs, carabaos, cattle, horses and goats. Gold, chromium and copper are mined in commercial quantities. Considerable embroidering

and weaving is carried on by home manufacturing, but factories are increasing. Chief exports are coconut and hemp products, sugar, base metals, lumber, canned pineapple and embroideries. Imports include rice, wheat, dairy products, iron and steel manufactures (especially passenger cars and electric refrigerators), soap and cigarettes.

COMMUNICATIONS

Overseas trade is carried mainly by American, Norwegian and British vessels. Highway mileage, nearly 18,000 miles; railways, about 700 miles; post offices, 1,660; telephones, 31,000; motor cars, 50,000; trucks, 54,000. Philippine Air Lines, Inc., provides domestic and international air service.

RELIGION AND EDUCATION

The dominant religion, Roman Catholic, comprises about 83% of the population; Philippine Independent Church, 7.6%; Mohammedans (mainly in Mindanao and Sulu), 4.1%; Protestants, 2.3%; pagans, 1.8%. Education is free and coeducational; more than 3,600,000 children attend 24,000 government schools. There are also private, normal, trade, agricultural and nursing schools. Besides the state-supported University of the Philippines, there are about 90 other institutions of higher learning, 12 of them in Manila alone, including the University of Santo Tomas.

CHIEF TOWNS AND POPULATIONS

Quezon City, capital (Luzon Island), 108,000; Manila (Luzon), 1,200,000; Cebu (Cebu), 167,500; Davao (Mindanao), 111,300; Iloilo (Panay), 110,100; Zamboanga (Mindanao), 103,300; Bacolod (Negros), 101,400.

Australia

...island continent

AUSTRALIA'S political and cultural heritage is Western. Yet it is physically an appendage of a non-Western world. Its landscape, vegetation, animal life are all foreign to the homelands of the Europeans who settled the continent. Sydney, Australia, is 11,630 miles by sea from London, 13,263 miles from New York. Modern Australia, to some extent, is trying to shrink this distance, to bring in new settlers, investments, buyers from the West. At the same time it is trying to increase trade with the very Asian neighbors whom its immigration quotas bar.

For some time the Australian immigration policy excluded not only Asians. It also severely limited the flow of non-British Europeans. After World War II a number of factors led the Australians to make an about-face. Among these factors were an inadequate labor supply and the need, in the words of a government official, "to justify our exclusive possession of this continent." Spurred by the ringing challenge of Immigration Minister Arthur Calwell, "populate or perish," the Australians turned to active promotion of European immigration. Roughly 100,000 persons a year have since flowed in. Today the "New Australians" make up 20 per cent of the labor force. Moreover, improved methods and increased mechanization—the technological revolution of our time—have helped to increase output enormously. The result has been a more healthy economic outlook and a marked upswing in productivity and gross national output of goods since about 1955.

The New Australians have brought change to the land in other ways. Melbourne, once the most English of Australian cities, boasts a welcome variety in cuisine. Italian and Greek restaurants dot the city. In Brisbane recently an

enterprising Italian opened a \$500,000 *pasta* factory, pointing out that consumption of spaghetti was growing by leaps and bounds.

Along with immigrants, Australia is seeking foreign capital—or has since the setback of the Labor Party in 1949. American investment in the island continent has risen sharply. It still does not compare with Great Britain's, but the rise seems sure to continue. The economy is still in a state of early growth in proportion to population, and thus attractive to investors.

Proof of that growth can be found in two projects begun in the 1950's in the Victoria-New South Wales area. The most far-reaching of the two is probably the mammoth hydroelectric installation being built to harness the rivers of the Snowy Range, at a cost of about \$930,000,000, over a twenty-five year period. The project will provide plenty of cheap power for domestic and industrial use, and the waters will be discharged into the Murray and Murrumbidgee river systems for irrigation use. Hardly less important is the mining of a brown-coal (lignite) deposit in the Latrobe valley (nicknamed the "Australian Ruhr"). Said to be the largest such deposit in the world the Latrobe plant provides coal yielding gasoline, oil, bitumen, plastics.

Development of other minerals is surging: iron ore, oil, bauxite, silver-lead, copper ore and uranium. Despite Australia's industrial progress, wool is still the country's best-selling export. The Australians have always lacked nearby markets for their manufactured goods. In an attempt to find a strong trading partner near home, the Government concluded a trade agreement with Japan in 1957 which makes that country Australia's second-largest customer. This step was taken in the face of strong anti-Japanese sentiment at home. Robert G.

THE CAHILL EXPRESSWAY as it passes over the Circular Quay on Sydney's magnificent harbor. The highway gives access to the city's growing suburbs stretching toward the east.

Menzies, prime minister during the 1950's, continually warned his countrymen, however, that their future is inseparable from that of Asia. "To you Americans," he once told a reporter, "it's the Far East. To us it's the Near North." His Government enthusiastically supported the 1950 Colombo Plan agreement, under which Australia, along with several other nations, most of them Commonwealth members, agreed to contribute funds and services toward the development of member Asian countries. Since

then, Australia has given technical and university training to ten thousand Asian students. Close relations with Asia are today basic to Australian foreign policy.

Menzies, who dominated Australian politics in the 1950's, is partially responsible for Australia's new "international" outlook. During his tenure in office he made an unusual number of good-will trips to the United States, Asia, Canada and Europe. His voice was frequently and respectfully heard in the British Commonwealth conferences. At home,

DAVID MOORE. BLACK STAR



despite rumors of disenchantment even within his own ranks, he led the Liberal-Country party coalition to victory in the elections of 1958 by a sizable majority.

The once-powerful Labor Party meanwhile has declined. In the late 1940's it fell to squabbling over communism. Finally, in 1955, a Roman Catholic bloc, convinced that Labor leadership was "soft" toward communism, left the party to form its own organization, the Democratic Labor Party.

Australia is the smallest continent and the largest island in the world. In fact, it is about twenty-five times the size of Great Britain. At its widest part it is 2,400 miles from east to west, and about 2,000 miles from north to south.

Australia is one of the oldest of the continents, formed at an early period in the earth's history. It is the most level in surface and the most regular in outline. There are no towering peaks—only the worn-down stumps of ranges that were high long ages ago. The chief mountain system is the Great Dividing Range. It runs like a giant fishbone down the whole length of the east coast, from the northern tip of Queensland to the southern part of Tasmania.

The range includes the beautiful Blue Mountains and the Australian Alps, in New South Wales, which boast Mount Kosciuszko, the highest peak in Australia (7,305 feet). Covered with snow in cold seasons, the Blue Mountains are a paradise for winter sports as well as for hunting and fishing.

Along the coast of eastern Australia there are wide, deep valleys that long ago were carved out of high plateaus by swift rivers. This same process left spurs of cliffs at the edge of the coast, flanked by sandy beaches.

One of Australia's most fascinating features is the Great Barrier Reef, which skirts the coast of Queensland. The reef—actually a maze of reefs, shoals and islands—stretches for 1,250 miles and shelters a lagoon of 80,000 square miles. Its strange plant and animal life is of great interest to scientists, and the government of Queensland has a research

station on Heron Island, in the heart of the lagoon. The reef is formed of coral—countless skeletons of tiny marine creatures called polyps. Flowerlike sea anemones wave their tentacles in the warm waters. Here live the dugong, or sea cow, and the mudskipper, a true fish, though if kept under water it will drown.

On the western side of the Great Dividing Range, plateaus, downlands and basins alternate. These gradually descend to extensive lowlands covering half the continent and containing, beneath the surface, the water reservoir of the Great Artesian Basin. Open forest clothes the plains in the low-rainfall but fertile eastern portion. Here sheep graze, forming the world's chief Merino wool-growing region. Beautiful opals, in which the fires of ages long past still shimmer, lie in the hard sandstone ridges in the "out-back" of northern New South Wales and western Queensland. The heart of Australia is a great plateau, usually dry. Here there are stony (gibber) plains.

Australia was cut off from Asia at such an early period in the earth's history that animals survived on the island continent that died elsewhere. It is the home of marsupials, animals that carry their young in pouches. The most famous marsupial is the kangaroo. With the tremendous strength of its tail and rear legs, it bounds across country in great leaps. Most endearing of the marsupials is the koala, which looks like a child's Teddy bear though it is not a bear at all. Australia is also the home of perhaps the strangest mammal in the world, the platypus. Its four feet are webbed, and it has the bill of a duck, the tail of a beaver and the fur of a mole.

More than a third of Australia lies within the tropics, and the other two thirds is within the South Temperate Zone. Because of this position and the fact that Australia is an island and has no great land barriers, it has, on the whole, a more temperate climate than other regions of the same size in the same latitudes. Over the greater part of the continent the climate is similar to that of southern France

or Italy. There are seldom any extreme degrees of heat or cold.

The winds that blow on Australia are the southeast trades and the prevailing westerlies. The southern limit of the southeast trades strikes Australia's east coast near the border of the states of New South Wales and Queensland. With a few exceptions, especially in Tasmania, the heaviest rains in Australia are along the east coast north of this point.

The westerly winds skirt the southern shores. They bring reliable, light to moderate rains to the southwestern parts of Western Australia, the agricultural parts of South Australia, to the greater part of Victoria and to the whole of Tasmania.

However, Australia has large areas of scant rainfall. In fact, nearly 40 per cent of the continent is, in effect, desert. Of this enormous area, 600,000 square miles is of practically no use to man and only



NEW YORK ZOOLOGICAL SOCIETY

IS THIS CREATURE BIRD OR BEAST?

The platypus, native to Australia, is a duck-billed, web-footed mammal that lays eggs.

wandering tribes of aboriginies can eke out an existence in it. In some places, water has been found by boring very deep (artesian) wells, but the water is apt to contain too many minerals and is not enough to make up for the lack of rainfall.

The main Australian river system is that of the Murray (1,609 miles) and its tributaries—the Murrumbidgee, Lachlan



AUSTRALIA, THE FASCINATING ISLAND CONTINENT



THE CORAL SANDS AND SUNLIT WATERS OF THE GREAT BARRIER REEF

Australian vacationers have discovered the attractions of the coral islands of the Great Barrier Reef, which were once haunted chiefly by marine scientists and gaily colored fish.



A BRIGHT CORAL GARDEN MORE THAN A THOUSAND MILES IN AREA

The Great Barrier Reef, a chain of islands north of Queensland, has been raised from the ocean floor by the action of microscopic coral animals working for many thousands of years.

THE ISLAND CONTINENT

and Darling. This system drains an area of 414,253 square miles, larger than the combined areas of France and Spain. The Murray and its branches rise in the Great Dividing Range and find their way to the sea through South Australia. On the eastern side of the Great Dividing Range, many short rivers run to the sea. So swift are their currents, however, that

corner of the continent. These forests are open and seem like parks. Both hardwoods and eucalypts are found in Western Australia. Here two of the chief timber trees are jarrah and karri. The karri is one of the handsomest trees in the world. It reaches up to 300 feet, seldom branching below 150 feet.

Beyond the eastern mountains are wide



A LOBSTER FISHERMAN PREPARES TO TRAP A SUCCULENT CRUSTACEAN

The export of frozen lobster tails is big business to the lobsterman. He buoys his wire pots with glass globes but, as in all fishing tales, some of the fish are carried away by the current.

few good harbors have been formed. Many of the rivers that run inland, north of the Murray system, are swallowed up in the dry sands of the interior.

In the tropical north are dense forests of cedar and other softwood trees. The famous evergreen eucalypt forests occur in the well-watered coastal regions of the eastern seaboard and in the southwest

belts of pine and more eucalypt trees. Farther inland there are savannas, where mulga and other acacias grow, and belts of mallee, a low-growing eucalypt. These areas are often well-grassed. Between the grassland zones and the desert regions are tracts of saltbush and bluebush. These are low, fleshy-leaved shrubs, which thrive in dry soil and are good



WHEN IT'S ROUND-UP TIME AT A NEW SOUTH WALES SHEEP STATION

At some Australian stations 70,000 sheep are sheared during the six-weeks shearing season. Here, a "jackeroo," Australian for young stockman, herds the sheep toward the shearing sheds.

sheep food. In fact, almost every plant in Australia may be eaten by sheep and cattle. For this reason, the wool and cattle industries are built more on herbage and scrub pasture than on improved grassland.

It was the American War of Independence that first turned Britain's eyes toward Australia. England's prisons were full and as the American colonies were closed to any more such exports of "undesirables," attention turned to Australia. Only a few years before, in 1770, Captain James Cook had discovered the east coast and had written about it with enthusiasm. So, in 1787, a fleet of eleven ships set sail for Australia with 1,500 persons—800 of whom were convicts. In January 1788, after a wearisome voyage of eight months, this fleet reached Botany Bay, near where Australia's largest city, Sydney, now stands.

The early settlers had a hard time. There were few farmers or skilled workers among them. Sometimes it was many months between rains and the soft English wheat they had planted died. For a long

time the settlers depended wholly upon supplies from England, including flour. When a ship was lost or delayed they went on hard rations of rice and salt pork. Too, the first settlement found itself hemmed in on a strip of land between two barriers—the vast Pacific Ocean and the wall of the Blue Mountains. Though not so high as the mountains of Europe, Asia and the Americas, these still presented a formidable obstacle to the further colonization of the Australian interior.

The land seemed anything but hospitable, and the establishment of permanent colonies was one of the toughest pioneering jobs ever undertaken. The outstanding names in early Australian history are not those of soldiers or statesmen but of explorers. These were the men who really developed Australia. They realized that they had to find better land than existed around the small settlement of Sydney, but it was twenty-five years before two men, named Wentworth and Blaxland, finally managed to find a way over the Blue Mountains. Once over the barrier, they saw great fertile plains that



GOING, GOING, GONE! BUYERS AT A MELBOURNE WOOL AUCTION

Bidding is a spirited but serious matter for these buyers from woolen mills the world over, who are competing for the best of the Australian crop at the Melbourne Wool Exchange auction.



GETTING WOOL OFF TO THE CITY MARKET FROM A SHEEP STATION

Heavy bales of wool are being dragged from the shearing sheds for transportation to the railheads. The bales are destined for Sydney, the biggest wool-shipping center in the world.



DRAY HORSES HAULING LOGS IN THE FORESTS OF QUEENSLAND

Machines cannot penetrate the dense interior of the Australian timberlands and horses and bullocks are still used. Queensland is noted for the fine quality of its cabinet-type woods.



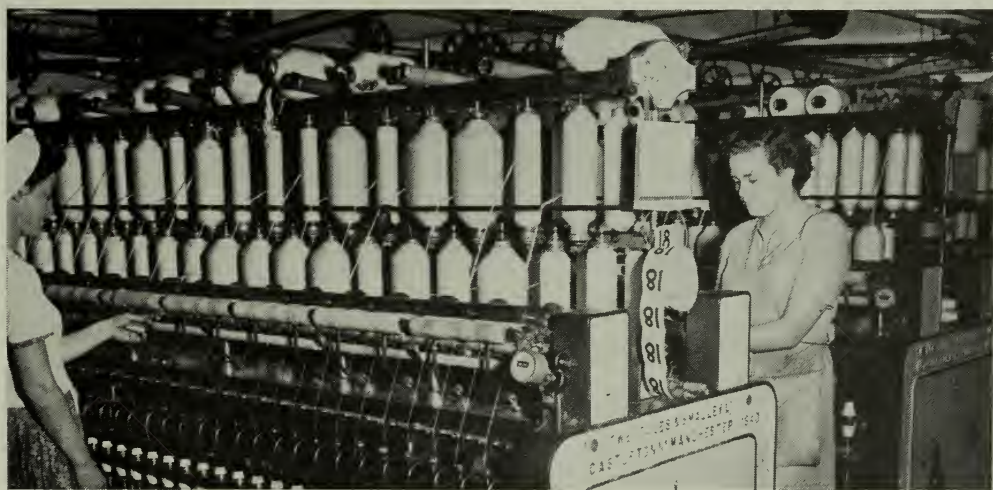
REAPING AND SPREADING A FIELD OF FLAX

A mechanical reaper-spreader cuts and spreads a flax crop in South Australia. The flax here is not grown for the fibers (source of linen) but for the seeds. They yield linseed oil.

stretched westward, and their reports started other explorers on the westward trek. Colonists followed, who brought cattle and sheep with them. In some ways progress was similar to the early development of the West of North America. However, as the Australians drove farther westward, they found deserts instead of great fertile valleys and prairies.

Thereafter the population increased very slowly, for there was little to attract newcomers. Settlement might have con-

tinued at this slow pace, but chance and one man's alertness changed the course of Australian history almost overnight. In 1849, Edward Hargraves, an unsuccessful sheep farmer of New South Wales, went to California to join the gold rush. He had no luck, but he was a very observant man and he noticed that the countryside where the richest California finds were made looked very much like the countryside around his Australian home. With this in mind, he returned to Australia in



WHIRRING SPINDLES IN A LARGE COTTON FACTORY

Australian textile mills produce fine fabrics for the home trade and for export. These girls are tending the spinning frame in a cotton mill in Kilkenny, South Australia.



DREDGING THE BROWN COAL MINES FOR FUEL AND ELECTRIC POWER

The dredgers used in the open pits of the brown coal, or lignite, mines at Yallourn, Victoria, can dig ninety feet. The mineral is used to generate electricity and for fuel briquettes.



PRODUCING STEEL FOR THE HEAVY INDUSTRIES OF AUSTRALIA

A view of the steel works at Newcastle, New South Wales. Newcastle, the center of the steel and coal industry, has played an important part in the rapid industrialization of Australia.

1851 and, within a few weeks, he struck it rich around Lewis Ponds, New South Wales. Hargraves' good fortune was followed by strikes in Victoria and Western Australia. The word spread and people poured in from all quarters of the globe. In the next ten years, Australia's population jumped from 405,000 to 1,145,000. During this period, Australia produced more than \$224,000,000 worth of gold. The discovery of gold also produced a social and economic revolution, for, prior to Hargraves' find, pastoralists, or squatters, had dominated the economic life and government of Australia. Though the country still rides "on the sheep's back" as far as overseas trade is concerned, the democratic ideas stirred up by the gold-mining days are now the accepted commonplaces of government.

The first Federal Convention, which prepared the draft constitution of the Federated States of Australia, was held in Sydney in 1891. The Commonwealth of Australia came into existence by an act of

the British Parliament in July 1900, which took effect from January 1, 1901. The Constitution was worked out by Australia's own leaders and was established by democratic ballot taken among the Australian people. The first Prime Minister was Edmund Barton.

To understand Australia's Constitution, we must remember that it is a federal constitution. That is, the governments of the various states did not lose their separate identities. The state parliaments, under the Commonwealth Constitution, agreed to federate, or to hand over some of their government powers—but by no means all—to a central, Australia-wide government.

The spirit in which the task of drafting a federal government was approached was expressed by one speaker in these words: "I hold it to be a basic principle of this federation that we should take no power from the States which they could better exercise themselves; we should place no power in federation which is not abso-



ORE MORE PRECIOUS THAN GOLD

The atomic age has sent the world on a treasure hunt for uranium ore. Modern prospectors armed with Geiger counters seek new deposits of the rare metal in the Flinders Range.

lutely required for carrying out its purpose."

There are about 10,000,000 Australians. The national income of Australia was almost \$11,000,000 in a recent year. At the same time the number of unemployed was down to 49,000—or barely 1 per cent of the 4,000,000-man labor force. Per capita income is today higher than in Great Britain and among the highest in the entire world.

Almost from the earliest days of settlement, Australia was a great primary producing country (agricultural products and basic raw materials), exporting large surpluses overseas. Today many persons abroad (and to some extent in Australia itself) are inclined to think of the average Australian as a man on the land. But although Australia retains her great primary industries, she has become one of the world's most highly industrialized nations, and the value of her production from industry is almost equal to that from the land.

It is interesting to note, however, that, in numbers, more than half of Australia's



A WESTERN AUSTRALIAN GOLD-DIGGER'S EQUIPMENT

The mechanical dryblower, at right, is used in the gold fields of Western Australia. As the tray shakes, dirt and dust are blown away, leaving any gold particles in the bottom.



THE FLARE OF THE WELDING TORCH AND THE RING OF THE HAMMER

At a gigantic New South Wales engineering plant, a welder seals the seam of a boiler. The man with the hammer hits the metal and the ringing sound tells him whether the metal is welded.



THE MAGNIFICENT HARBOR OF SYDNEY, AUSTRALIA

Sydney, the largest city and seaport of Australia and a famed industrial center, is the capital of New South Wales. It is the oldest Australian city, as well as the most populous, having been founded in 1788. In the foreground is seen one of the world's great steel arch bridges, the Sydney Harbor Bridge. It is 160 feet wide and has a span of 1,650 feet.



MANES FLOWING AND FEET FLYING, WILD STALLIONS SEEK FREEDOM

The brumby muster is a rough and exciting chase. Brumbies are Australian wild horses. A cowboy pursues the stallions toward the open country, away from the treacherous rocks.



ROUGH RIDING IN THE VAST CATTLE COUNTRY OF QUEENSLAND

Goondiwindi, Queensland, is the scene of the annual Bushman's Carnival. This cowgirl is competing in the camp drafting contest. In this event the task of the rider is to cut out a bullock from the herd and to drive the animal to a designated sector of the corral. The judges award points for the degree of horsemanship displayed by the hard-riding cowhands.



AN AERIAL VIEW OF THE FEDERAL PARLIAMENT HOUSE IN CANBERRA
Canberra, the capital of Australia, is a lovely tree-lined city situated at the foothills of the Australian Alps. The monument in the foreground is the King George V Memorial.



WAITING FOR THE GAME TO BEGIN AT THE MELBOURNE CRICKET GROUND
When Australia plays host to the "Battle of the Ashes," a series of championship cricket matches between England and Australia, the contest is held in this huge cricket ground.

THE ISLAND CONTINENT

industries are tertiary—that is, they provide services of various kinds. This means railways and roads, air lines, telephones, telegraph, radio and so on. The large proportion of such industries shows that Australians have a comparatively high standard of living.

Wool is Australia's greatest primary industry. In a recent year there were 116,000,000 sheep, and the value of the

Beef production runs to about 650,000 tons a year, and dairies produce about 165,000 tons of butter and 45,000 tons of cheese. Supplies of beef, mutton, lamb, butter and cheese are usually above the quantities needed at home, and the surpluses are exported, mainly to the British Isles.

Although Australia does not rank high as a wheat-producing country, she is one



EIGHTEEN-FOOTERS SKIM ACROSS THE WATERS OF SYDNEY HARBOR

Yatching is not a rich man's sport in Sydney, but a popular pastime. On regatta days, the eighteen-foot sailing yachts with ballooning spinnakers are the rulers of the big harbor.

total wool production was about \$750,000,000. With a normal annual clip of more than 1,000,000,000 pounds, Australia produces about 30 per cent of the world's wool and more than half of its merino wool. It produces 40 to 60 per cent of all wool and 70 per cent of all merino wool entering into world trade. Lamb and mutton (277,000 tons in a recent year) and sheep skins are important parts of the industry.

of the world's four principal wheat exporters. More than half the crop is shipped abroad. In a recent year the harvest from nearly 12,000,000 acres was 184,000,000 bushels.

There are important coal fields in the eastern mountains. In fact, the brown coal of Yallourn gives the state of Victoria most of its electricity. Early in the 1950's, uranium was discovered at Radium Hill, in South Australia.



A STATELY, MODERN HIGH SCHOOL BUILDING IN MELBOURNE

The Australian states support the primary and high schools in their areas. The Boys' High School at Forest Hills, a suburb of Melbourne, is one of the finest schools in Victoria state.

The majority of the Australians live in towns or in the capital cities of the six states. Largest of all is Sydney, capital of New South Wales. It has a magnificent harbor, spanned by one of the greatest steel arch bridges in the world. Sydney's George Street is the busiest thoroughfare in the whole of Australia.

Canberra, capital of the Australian Commonwealth, is in its own Federal Territory, not far from Sydney. Everywhere in Canberra there are avenues of trees—native gums (eucalypts), foreign oaks and flowering fruit trees. The location of the city is beautiful. To the south are the Australian Alps and to the north the Blue Mountains. In recent years, the population of Canberra has been growing at a rapid rate.

Darwin, once simply a lonely outpost on the northern coast, also has been growing at a swift pace since World War II, when it was the target for devastating bombing raids. The town is the chief trading center for the Northern Territory and a terminus for overseas air traffic.

The largest shipyards in Australia are at Whyalla, on the coast of South Australia. This town is becoming one of the country's most important industrial centers. Near by are Australia's chief iron-ore resources, and there are plants for

the manufacture of steel in Whyalla.

Australia is one of the most highly urbanized countries in the world. One reason for this is that settlement has been mainly on the fertile coastal strips. Also, Australian agriculture is highly mechanized, which means that large farms and livestock stations can be run with comparatively few hands. What is more, the growth of a big export trade has led to the development of the ports that, in most instances, are the state capitals.

In New South Wales, the railways radiate from Sydney like the spokes of a giant wheel. They also branch out from Melbourne, capital of Victoria, from Adelaide, capital of South Australia, and, to a lesser extent, from Brisbane, capital of Queensland, and from Perth, capital of Western Australia. In all there are some 28,000 miles of railways, which carry about 500,000,000 passengers a year.

Air transport is playing a big part in Australia, a land of immense distances. Air routes over the continent total 68,000 miles. By flying-boat, it is only a few days from London, by way of India, or from the western coast of North America. Today, Australia is a crossroads south of the equator of both air and sea routes.

Because of its special features, Australia has developed some novel educa-



ST. KILDA ROAD, ONE OF MELBOURNE'S TREE-LINED BOULEVARDS

In 1837 the city, founded two years before, was named in honor of Lord Melbourne, British Prime Minister. It is laid out with wide thoroughfares and numerous parks and public gardens. Between 1901 and 1927 the city was one of the temporary seats of the Australian Government. The spired church at the left of this picture is St. Paul's Cathedral.



ESSENDON, MELBOURNE, AUSTRALIA'S BUSIEST AIRPORT

A passenger bus leaves Essendon Aerodrome for Melbourne, seven miles away. Air travel is one of the principal means of transportation between the widely scattered Australian cities.

tional systems. For children who live on sheep and cattle stations, long distances from any town, instruction is given by correspondence. In each of the state capitals there is a school with perhaps forty to eighty teachers and no visible pupils.

Tasmania was a pioneer in developing what are called "area" schools. Ten to fifty acres are set aside as a school estate. The children who attend receive class-

room instruction and they also work on the estate in various activities related to their studies. They build barns, sow crops, care for livestock and so on.

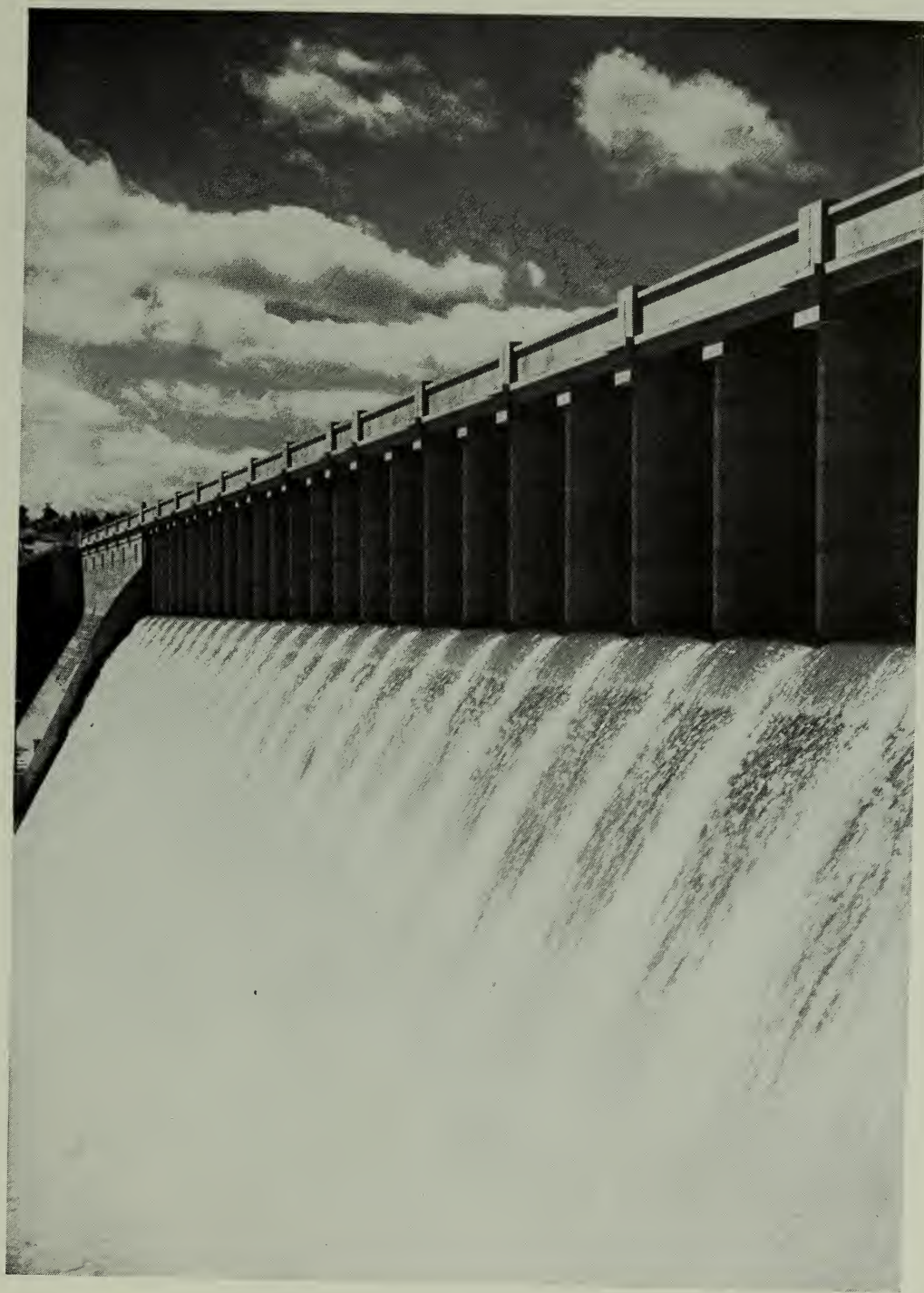
The Australians are friendly people, who welcome visitors with open-handed hospitality. Descendants of pioneers who suffered great hardships, they are robust and independent-minded.

BY HARTNEY ARTHUR



DARWIN, CAPITAL CITY OF THE TROPICAL NORTHERN TERRITORY

Darwin was badly damaged by Japanese bombing raids during World War II. The houses on this rebuilt road are especially designed for comfortable living in a tropical climate. Airy and louvered (using slanted boards to admit air and keep out rain) they are built on stilts for coolness and to keep out the wood-eating termites that infest the area.



HARNESSING THE WATERS OF THE MIGHTY MURRAY RIVER

The spillway of the Hume Dam, part of a vast irrigation project on the Murray River. The Murray, with headwaters in the snow-capped Australian Alps, wanders for 1,609 miles, forming the boundary between the states of Victoria and New South Wales. The great Hume Reservoir supplies water to irrigate the sun-drenched plains of central and northwest Victoria.



PREPARING TO STRIP THE BLUBBER FROM A HUMPBACK WHALE

Whales are brought from the catcher boats to the shore station at Babbage Island. They are then flensed—stripped of their skin and of the blubber, which is processed into meal and oil.



CARRYING IRON ORE TO THE BLAST FURNACES OF NEWCASTLE

The Iron Yampi is an Australian-built cargo ship which makes the run from the iron mines at Cockatoo Island to the steel workers at Newcastle and Port Kemblea, in New South Wales.



HIGH TENSION AT THE "HEAD" OF A GAME OF BOWLS

At the end of a game of bowls, the players often use a tape measure to determine which of the bowls is nearest to the "jack," the small white ball at the center of the photo.



TASMANIAN FISHERMEN READY THEIR BOATS IN HOBART HARBOR

Hobart, the capital city of the beautiful, heart-shaped island of Tasmania, smallest state in the Commonwealth, is a thriving port with unsurpassed shipping facilities.



ALL PHOTOS, UNLESS OTHERWISE INDICATED, AUSTRALIAN NEWS AND INFORMATION BUREAU

HOP-PICKING TIME IN THE BUSHY PARK-GLENORA AREA, TASMANIA

Each hop picker watches intently the vital business of weighing the bags of hops. The picker's wages are based on the weight and the number of bags he has picked in a day.

AUSTRALIA: FACTS AND FIGURES

THE COUNTRY

Australia, the smallest continent, is bounded on the north by Timor Sea, Arafura Sea and Torres Strait, on the east by Coral and Tasman seas, and on the south and west by the Indian Ocean. The island of Tasmania, to the south-east, is separated from Australia by Bass Strait. Area, including Tasmania, 2,974,581 square miles; population, 9,149,000.

GOVERNMENT

A sovereign member of the British Commonwealth of Nations, it consists of 6 states—New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania—and 2 territories—Northern Territory and Federal Capital Territory. Legislative power is vested in a Federal Parliament that consists of the Governor-General as representative of the British crown, a Senate and a House of Representatives. Executive power, formally vested in the Governor-General and an Executive Council, is actually exercised by a Prime Minister and Cabinet ministers who represent the majority party in parliament. For all citizens, male and female, over the age of 21, voting is compulsory; failure to vote is punishable by fine.

COMMERCE AND INDUSTRIES

Pastoral industries and agriculture are among the chief occupations. About 152,587,000 head of livestock. Chief crops are wheat, oats, barley, hay, potatoes, sugar and fruits. Coal, gold, silver, lead, copper, zinc and tin are the leading

minerals. Manufactures include iron and steel, textiles, electrical and radio equipment, drugs, chemicals, paints, machinery and metal work. Leading exports: wool, wheat, meats, flour and butter. Imports: motor vehicles and parts, petroleum, textile piece goods, power machinery. Monetary unit, the Australian pound.

COMMUNICATIONS

Government-owned railways, about 26,808 miles; about 647 miles privately owned. Roads, about 521,000 miles. There is regular air mail and passenger service. Telephone and telegraph systems, government-owned; number of telephone sets, 1,066,385; more than 9,500 telegraph stations; 148 radio transmitting stations.

RELIGION AND EDUCATION

No established church; nearly half of the people belong to the Church of England. The states control and finance public education. Total of primary and secondary, including privately endowed, schools, is 9,546. Each state has a university and the National University of Canberra provides facilities for postgraduate research.

CHIEF TOWNS

Canberra (capital), 28,300. State capitals: Sydney (New South Wales), 1,863,250; Melbourne (Victoria), 1,524,000; Brisbane (Queensland), 502,400; Adelaide (South Australia), 483,600; Perth (Western Australia), 348,600; Hobart (Tasmania), 95,250.



FISHING IN THE ANCIENT MANNER

Standing in his dugout canoe, the aborigine watches the water intently, his spear ready to pounce on the first passing fish. Eye and hand work in partnership with incredible speed.

Australia's

Aborigines *...the original people* *of the island continent*

THEIR origin shrouded by the mists of antiquity, the Australian aborigines form a race apart. They are wandering hunters and food gatherers, without settled communities or knowledge of agriculture, even in their present comparatively civilized state. Yet they have complicated systems of tribal government, social organization and religious beliefs. In the old colonial days they were regarded as being of the lowest intelligence and mere cumberers of the earth. Today, however, the Australian Government is trying to keep this colorful race from suffering the fate of the native Tasmanians, who died out in the late 1800's. When Captain Cook sailed along the east coast of Australia in 1770, it is estimated that there were about 300,000 aborigines. Today there are less than 50,000 of pure descent. We may well describe the decline of these primitive, hardy people as a tragedy.

The southern tribes are represented by only a few broken-up remnants. Decline has been rapid among natives of the central region and in the tropical north. The only exceptions to this are in Arnhem Land and the Kimberly country of the Nor'-west, where large numbers of aborigines are living as their ancestors lived before the coming of the white man to this island continent.

It was very early in human history when the aborigine arrived in Australia

—perhaps more than sixty thousand years ago. Whence he came we can only conjecture, but the evidence indicates that the ancestral Australians were a small band of venturesome people from southeastern Asia. It is probable that they were the first human beings to come to the land of the kangaroo. They brought with them a wild dog, the dingo, which increased rapidly and spread throughout the continent.

However, some authorities believe that, ages ago, Australia and Tasmania—which were not then separated from the mainland by Bass Strait—were probably occupied by a race of Negrito people. Perhaps members of a more advanced stock came at a later period and, intermarrying with the original inhabitants, produced a new people. The second of these two theories is disproved by the fact that the aborigines are of an extraordinarily pure stock. They definitely cannot be classed with the Negro, nor do they appear to be related to the Polynesians, the Melanesians or the Micronesians. Their dark-brown hair, bushy, wavy or curly, and generally of coarse texture, resembles that of certain wild tribes of India, and distinguishes them at once from the woolly or frizzy-haired Melanesians and Negroes, and also from the lost Tasmanian people, who were certainly more primitive than the migrants from southeastern Asia.



A LONG WALK UP THE COCONUT PALM

Coconuts grow in a cluster at the tip of a palm tree, 80 to 100 feet high. The nut gatherers must literally walk straight up the tree; there are no branches to break the climb.

AUSTRALIA'S ABORIGINES

The boomerang has been described, by Lydekker, as "a very curious connection between the Australian aborigines and certain of the wild tribes of Southern India." It is a weapon unknown to any other peoples. The so-called boomerangs of India and of the ancient Egyptians are merely curved throwing sticks, of which the Australian aborigine has many. The true boomerang is an Australian invention, whose essential feature is its ability to hover or remain comparatively motionless in the air. The "return" boomerang, rarely used in hunting, except for throwing into a flock of birds, may be regarded as more or less a plaything. There are hunting boomerangs and fighting boomerangs. Both of these are longer and less curved than the "come-back" one, which can be thrown to travel distances of more than one hundred yards, sometimes mak-

ing several loops.

The aborigine, although sometimes very closely approaching black, might be termed a brownskin, for, frequently, his skin is of a light brown color. The aboriginal infant is born cream-colored; but in a few days its skin darkens, only the palms of the hands and the soles of the feet remaining of a light hue throughout life. Among natives of the western Macdonnell Ranges, the newborn babies, in the majority of cases, have white or tow-colored hair, which darkens with age.

One peculiarity of the aborigine is found also in skulls of Neanderthal man of ancient Europe—an excessive prominence in the bony portion of the skull just above the orbits. This protects the eyes, which are usually dark brown. Very protuberant jaws are a Negrolike feature. The aborigine's nose, though generally broad and



ABORIGINES ARE BORN HORSEMEN

In Arnhem Land live 3,000 aborigines, nomads all. Sometimes they drop in at one of the isolated European missions. Above is a mission corral, with a casual visitor showing his equestrian skill.

AUSTRALIA'S ABORIGINES

flat, is sometimes distinctly aquiline, as in members of the so-called "Jewish" tribes of central Australia.

The women especially have a stately and graceful walk. They possess a natural dignity, which is apt to be hidden when they wear European clothes. Even partly civilized aborigines of the center and the far north wear but little clothing—the little children, none at all. Many, still living in

common articles of clothing worn by both men and women in wintertime. Summer dress for a man was an apron. Women of some south Australian tribes wore bark or skin cloaks over their backs. Bark-cloth capes were also the fashion among certain Queensland tribes.

Many of the girls are handsome; but all too soon they lose their young charms, becoming "old" women before middle age.



AN ANCIENT MYSTICAL RITE

The spear dance, a ritual during a corroboree, or sacred festival, has a secret meaning known only to an inner circle. Both men and women take part, their faces painted ceremoniously.

the Stone Age manner, go naked, except for girdles, or waist-belts, with a pendant of pearl-shell or a tassel made of fur. The women wear a bark belt, or a fringe. Human hair is the usual material for making waist-cords or girdles, which often are many yards in length. When tribes still lived in the south, of course, they needed some protection against the cold weather, and kangaroo and possum-skin rugs were

The young men of the tribes that have little or no contact with Europeans show the aborigine at his best. He is a natural man, fit subject for a sculptor. And the old men, who administer all tribal matters in their own favor, make a picturesque group sitting in secret council. The younger men are the hunters, but the choicer portions of the game they bring back to the mia mias (the tribal camps) go to the wise



MOTHER AND CHILD OF THE NULLARBOR PLAIN

Aborigines still roam a large, curious region of southern Australia that is perfectly flat. There is not enough moisture to support trees, hence the name Nullarbor (no tree) Plain.



IN FULL PANOPLY OF WAR

Spears, boomerangs and firesticks are the weapons. Emu feathers make the ferocious-looking helmet. Morale is contributed by the war paint—white clay and red ochre—to terrify the enemy.

old fellows according to tribal law.

Although yams and other vegetables form a large proportion of the daily fare, the aboriginal menu includes many items curious, even repulsive, to other people. Witchetty grubs, for example, white ants (termites) and their larvae, caterpillars and clay. Animal tucker is as varied,

ranging from kangaroos, wallabies, 'possums and bandicoots to flying foxes (fruit-bats) and wombats, sometimes even the dingo; birds, large and small; and snakes and lizards. On special occasions untamed tribes may be cannibalistic. Cannibalism was widespread before civilization modified or changed completely such savage

customs as the eating of human flesh. Coastal tribes enjoy a far better standard of living than do those of the dry inland regions. At all seasons on the coast there is an abundance of food—fish, turtles and dugong and various kinds of shellfish. In the tropical north, wild pigs provide excellent pork.

The Medicine Man's Power

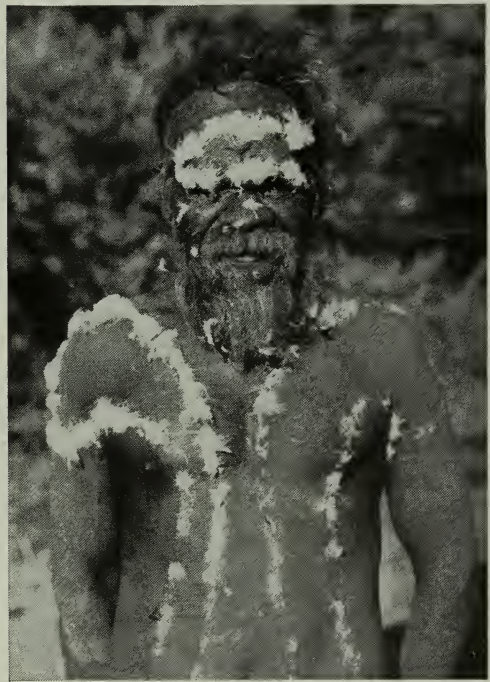
Although there are no kings or chiefs among the aborigines, a leading position may be held by some outstanding member of a tribe, often the medicine man, whose authority becomes supreme at all meetings of the council. He is recognized as the headman, whose decisions on any matter are unquestioned. The medicine man, apart from treating patients by various methods, including faith cures and mumbo jumbo, often is well paid to cause an enemy's death by pointing the bone. Any aborigine may point a death bone, but when the medicine man sings over one and performs the essential actions, the result is more certain. Unless powerful counter magic comes to his aid, an aborigine who knows that he has been "boned" sits down in despair, sickens and dies. This mysterious power has yet to be explained by modern science, although it is probably psychological.

One of the many strange customs rigidly observed by the aborigine is avoidance of the mother-in-law. Under dire penalty, no man may look at his wife's mother, nor may she look upon him.

It is harder for women than for men among these nomads. Each tribe wanders within the boundaries of its own territory, living in temporary camps; and the women bear the burdens when camp is shifted. Besides carrying heavy loads of household gear, spare weapons and so on, they must carry the fire-stick and keep it alight. As widows, their lot is harder still, for mourning customs include, not only wailing and shrieking by the lubras (women), but the gashing of their heads with stone knives. Heavy widows' caps, formed of kopai and burned lime or gypsum, were worn by the women of vanished Murray River tribes, and a ban of silence was placed upon the

luckless widows, a ban often lasting for months.

Aborigines living under the age-old tribal laws are a moral folk. The laws are strictly enforced, especially those governing marriage. Breaches of some of these laws are punishable by death. This social organization ranks the aborigines above some other primitive races. Not even scientists who study races fully understand the systems of tribal government and all the ceremonies and beliefs that make the aborigine almost a mystery man. While trained scientists have devoted years to the study of this primitive man's most intimate



ALL DRESSED UP IN EAGLES' DOWN

This headman is wearing his ritualistic adornment for the chicken and emu corroboree. Eagles' down is pasted to his body with blood.

Chicken and emu are totems of the tribe.

life—which embraces cult totemism (a totem is an object or animal regarded as having blood relationships to a specific family), religious systems and beliefs, family, kinship and complicated marriage laws—it is admitted that these are still mysteries beyond the comprehension of the

average person not an aborigine himself.

Many of their myths and legendary tales are as imaginative as those of much more advanced peoples. A selection of the bedtime stories told among the mia mias, with a little editing, would make a delightful book for children anywhere. The Alcheringa, or Dream Time of the World, when there were only spirits, who created the ancestral spirits of totem animals, groups of men and natural objects generally, is a complicated idea that could have been developed only by myth-makers gifted with intelligence as well as imagination.

Many vocabularies of the aborigines, more or less extensive, have been published. A patient student of the primitive forms of speech thus recorded will learn that the Australian language was general all over the mainland; certain root sounds are found everywhere. However, the numerous dialects show wide variations. An aborigine of the Daly River, say, would find it difficult to understand a native from the Darwin district, speaking in the Larrakia dialect. Such variations, of course,

must have developed through centuries.

There is no written Australian aboriginal language, though there are the "letter sticks," carried by official messengers and trading emissaries. These may be emblems of authority, aids to memory, or an invitation from the council of Old Men of a leading tribe to other tribes to attend some important gathering of a national character, such as an initiation ceremony. A letter stick relating to a ceremony bears markings that are readily understood by all headmen of the nation—a nation consists of a varying number of tribes.

The ceremonies of initiation into manhood are reasoned tests of endurance for the boys, apart from their tribal significance.

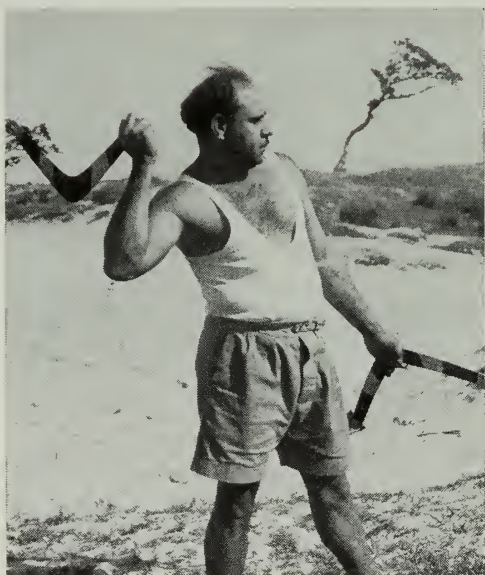
In their ceremonies, the aborigines are very serious, but they possess a sense of humor and are fond of rather rough fun. This is some relief from the fear of spirits and black magic and from the strictness of tribal laws. Aborigine youngsters may have as much fun as other children enjoy, but much of their play is training for the time when the boys will become hunters and warriors. Their playthings include little boomerangs and toy spears. They receive lessons in tracking both men and animals.

Corroborees and "Cat's Cradle"

Dances and games delight the grown-ups. The corroborees sometimes witnessed by outsiders are merely song-and-dance performances—a form of amusement, as the familiar word signifies (*corro*, to leap or jump; *boree*, to shout or yell). Western ballroom dances have been described as civilized corroborees. At "cat's-cradle" games the aborigines excel; they are highly accomplished artists in string. Even the girls and boys make, with ease, complicated designs beyond the skill of any other children.

A glance at the aborigine's manners and customs, amusements and achievements, at his daily life and his religious beliefs, reveals him as a deeply interesting human being, with both virtues and failings, like all other men.

By CHARLES BARRETT, C.M.Z.S.



**THROWING A "COMEBACK"
BOOMERANG**

The aborigine can throw a boomerang so that it will hover briefly motionless. The "comeback" boomerang is not much more than a toy. Hunting and fighting sticks do not return.



ALL PHOTOS, AUSTRALIAN NEWS AND INFORMATION BUREAU

A VICIOUS STING RAY SURRENDERS

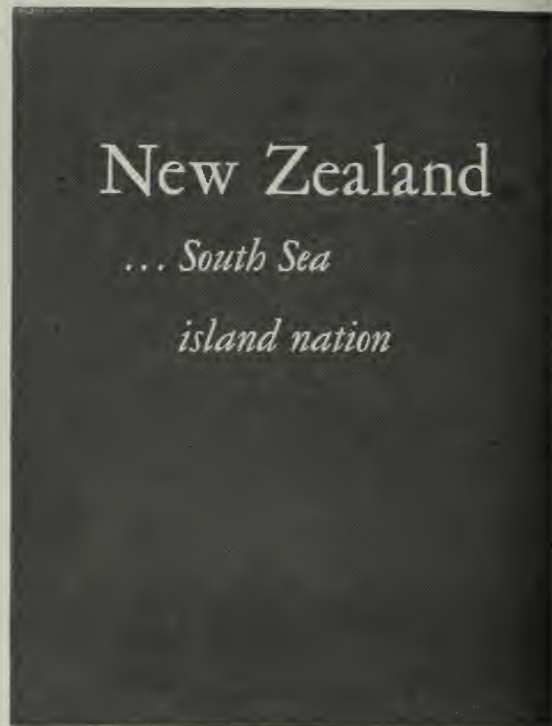
Fishing becomes dangerously exciting when a sting ray swims past the dugout. These monsters have a whiplike tail armed with sharp spines that exude poison. The meat of some species is edible.

NEW Zealand has been much more successful than Australia in preserving its traditional pattern of living against the winds of change. While the dynamic neighbor across the Tasman Sea continues its transformation into a modern industrial state, welcoming foreign capital and immigration, New Zealand remains predominantly pastoral. The New Zealanders are blessed with a green, fertile land. Some 46,800,000 sheep crop the green, rolling hills. Moreover, the size of the population thus far admirably fits the area of the islands. In addition to its natural advantages, New Zealand boasts an advanced system of welfare benefits which began during the reform period at the end of the nineteenth century. In fact, this gentle, quiet land claims, with justification, to be the first modern welfare state.

On the other hand, such industries as pulp and paper, auto assembly, steel manufacture and aluminum smelting are expanding.

New Zealand's concern for preserving the *status quo* can be seen in its immigration policy. Although Australia, too, long restricted the number of immigrants allowed in each year, it is loosening up considerably today. New Zealand, on the other hand, actually cut down on its assistance program to immigrants in 1958, a recession year. The economy has righted itself since but the influence of the trade-unions keeps government help to talented immigrants at a minimum. In a recent year only 1,500 immigrants entered on the basis of the government plan. Roughly 20,000 newcomers arrive every year under their own steam but many of these are unskilled. Critics of such limited assistance claim that it is holding back further industrialization. The lack of an adequate labor supply, one of them has said, acts as "a brake on economic expansion."

Some New Zealanders, however, are not so sure that "expansion" is a desir-



able goal. As it is, the country is well-nigh a Socialist's paradise. In addition to the standard programs—medical, hospital, unemployment and old-age insurance—the state guarantees a two-week paid vacation, weekly allowances to invalids and allowances of several sorts for "emergencies." Also, from the viewpoint of labor, a small labor supply means no unemployment. Even at the depth of the 1958 recession, New Zealand's unemployed numbered only 2,000 out of a total population approaching 2,500,000. To an American reporter who complained of the nation that "it isolates itself from the global race for self-improvement," New Zealanders might well answer that they have already won that race.

Butter, meat and wool are the mainstays of New Zealand's economy. These, along with a strong sympathetic attachment to Great Britain and a strong military attachment to the ANZUS pact, determine New Zealand's foreign policy. The word ANZUS is derived from the initials of the pact's three signatories—Australia, New Zealand and the United



APPELLE. BLACK STAR

VAST FLOCKS of sheep amble across the grassy hills to pens for seasonal shearing.

States. The pact provides for mutual co-operation between the three nations to guard their territories from armed attack. For a while the ties with America bothered the New Zealanders. They are among the most "British" of all the Commonwealth peoples and display a fierce loyalty to the mother country. In 1939, then Prime Minister Savage said, with war threatening, "Where she goes, we go; where she stands, we stand." The New Zealanders were afraid that the Anzus commitment might wean them away from Britain's sphere of influence. In 1956 this fear was heightened by the Suez crisis. Considerable feeling was then aroused by the United States' refusal to back Britain's participation in the invasion of Egypt. British Prime Minister Macmillan's 1958 visit helped soothe matters a bit, however. He said, among other things: "There are some who feel that the pact which New Zealand and Australia made with the United States

has somehow weakened your links with us. But to my mind these arguments have no force at all . . . Upon the close co-operation and alliance of the Commonwealth and the United States almost everything today depends."

Nonetheless, New Zealand is periodically irritated by American export of dairy products below world market prices. A note from Wellington to Washington in 1955 complained that such practices "constituted dumping" (unloading surplus goods at uneconomic prices) and risked "grave injury to the economies of smaller and weaker nations such as New Zealand." Despite some American concessions on this matter and despite a \$46,000,000 loan from thirteen American banks to New Zealand in 1958, the country is still not sure whether the United States is an ally or a competitor. An adverse balance of trade with the United States persisted all through the postwar period, letting up only in the late 1950's.

If the frequent charge that New Zealand is too cozy and dull is true at all, it

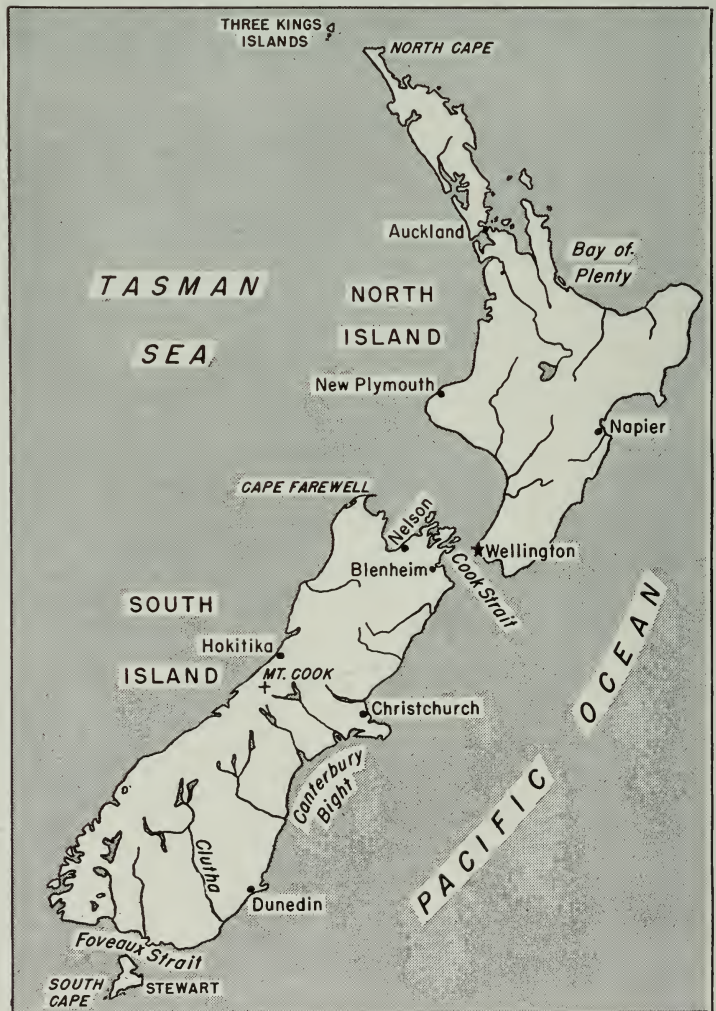
NEW ZEALAND

is in the realm of politics. After a long period of daring leadership in the nineteenth century and again during the 1930's, the Labor Party fell prey to the supposedly pro-free-enterprise National Party in the 1949 election. Since that time the two parties have traded triumphs, each one moving closer to the other in the middle of the road. The two parties differ little today. For a time, the Labor Party took a more critical view of American foreign policy than the Nationals, but this was hardly in evidence during their 1957-60 administration. Both parties are content, and perhaps rightly so, to implement the enlightened welfare state created by the sweat and struggle of yesterday.

In its thousand miles from north to south, New Zealand contains an amazing diversity of physical features. Its scenic wonders equal and often surpass those of the rest of the world. It has mountain ranges of extreme grandeur; scores of beautiful lakes and fiords; the largest and most complex thermal (hot springs) region in the world; one of the world's highest waterfalls; and the most remarkable glowworm cave yet discovered. The climate is pleasant, without extremes of heat or cold, and there are many days in the year when the sun shines brightly.

New Zealand, a self-governing member of the British Commonwealth, lies in the South Pacific, some 1,200 miles south-east of Australia. With a total area of

NEW ZEALAND'S TWO ISLANDS



103,736 square miles in its two main islands, this little country is slightly larger than its motherland, Great Britain, 13,000 sea miles away. The bonds that link New Zealand with Great Britain are strong, and the loyalty of New Zealanders to the Crown is real. This was proved during two world wars and in the periods of peace that followed.

Remarkable development has taken place in New Zealand since about 1850. The passing years have seen the face of the land change from wild forest to highly productive pasture, until today New Zealand is a leading exporter of mutton, lamb, butter. Tiny settlements of roughly built huts have grown into great cities and ports and important market towns. Roads and railways have thrust their way over rugged highlands; huge power dams have been built to harness rivers; universities, schools and other centers of culture have established fine records; daring experiments in social legislation have given the world a lead, which many countries have already followed.

Discovery and Settlement

The Dutch navigator Abel Tasman received a hostile reception from the Maoris (the native Polynesian people) when he discovered New Zealand in 1642. He sailed away without gaining a real knowledge of the land. It was left to an Englishman, Captain James Cook, who made his first visit in 1769, to map the coast line thoroughly. He also came to know the Maoris and made friends with them.

Casual settlement began early in the nineteenth century, with whalers, adventurers and deserters from ships. This was soon followed by planned immigration. The permanent settlement of New Zealand was no haphazard affair. A Scottish venture, organized by the free Church of Scotland, made its landfall in the southern province of Otago, the part of New Zealand nearest in natural features to Scotland itself. The Canterbury Plains received settlers from the Anglican (Church of England) organization in the central counties of England. The Taranaki province, closely resembling Devon

in many aspects, was founded by pioneers from the south of England. The newcomers were well educated, which had its effects in the establishment of New Zealand's fine system of schools.

Native chiefs ceded the islands to the British Crown by the signing of the Treaty of Waitangi in 1840. The treaty recognized the rights of both the Maori and European inhabitants.

New Zealand was granted a constitution in 1852, and a Parliament in 1854. This was, in fact, a series of parliaments, for in addition to the General Assembly, the provinces also had assemblies. These lasted until 1876. Maoris were given parliamentary representation in 1864. All men of adult age were given the vote in 1879, and women were given the vote—for the first time anywhere in the world—in 1893. Dominion status came in 1907.

Today, 98 per cent of the European population are of British stock, and most of the other 2 per cent are descended from French, Danish and Norwegian pioneers, who settled in communities that have left their mark in place names and in the surnames of their descendants. Foreign-born muster less than one per cent of the country's population, in spite of the several thousands brought to New Zealand under the plan of the International Refugee Organization. The balance of the people are the native Maoris, numbering some 150,000, or 6 per cent of the total population, with whom European New Zealanders—pakehas—live in friendship and on terms of equality.

This island country has a ruggedly beautiful coast line. Inland there are deep, swift rivers, which rush down from high mountains and flow through the greenest of pastures where well-fed sheep and sleek cattle graze. New Zealand's highest mountain, Mount Cook, in South Island, pierces the clouds to rise 12,349 feet above sea level. In North Island there are two famous active volcanoes, Ngauruhoe and Ruapehu. It is not wise to venture too close to them, for now and then they discharge sulfurous fumes, ashes and even great rocks and hot



STALACTITES INCREDIBLY OLD

Stalactites and stalagmites merge in Aranui Cave, Waitomo, North Island. New Zealand is a geologist's paradise, with caves, hot lakes and thermal springs, volcanoes and geysers.

lava. Tongariro, beautiful Mount Egmont, often likened to Japan's famed Fujiyama, together with Tarawera—all in North Island—are extinct or quiet volcanoes. Mount Tarawera erupted last in 1886, destroying many villages as well as the beautiful pink and white terraces that had been one of the world's wonders.

In North Island is the world-famous Rotorua-Taupo area. This thermal region seems almost from another world. Freakish geysers shoot columns of steaming water into the air. The ground, vividly colored by minerals and in places hot and crumbling beneath the feet, is dotted with boiling springs and pools of hot mud. The Maoris living in the area have hot water for the asking at their back doors. They make good use of the hot pools for cooking and bathing.

The backbone of South Island is the Southern Alps, some of whose peaks are clad in eternal snow. On the west coast of this island are the famous glaciers called Franz Josef, Fox and Tasman, and wonderful fiords that rival in beauty those of Norway.

Man-Made Forests of Foreign Trees

New Zealand has no less than fourteen million acres of native forest, much of it state-owned. An adequate balance is maintained between timber needs and the conservation of scenery, water and soil. Vast man-made forests of timber trees introduced into New Zealand grow to maturity twice as quickly as they do in their native countries. They are already producing a large portion of the country's timber, and will provide the raw materials for New Zealand's pulp and paper making industry, which is being developed.

The land is the source of almost all the country's wealth. The natural advantages of climate and soil, stimulated by specialized farming techniques and scientific aid, have boosted the productivity of farmlands to a remarkable level. With electrification and the use of machines for farm operations, production per farm worker is the highest in the world—twice that of Britain, and three times that of Canada or the United States.



THIS IS THE WAY NEW ZEALAND FLAX GROWS

While European flax may grow to four or five feet, the New Zealand flax is gigantic. Long before the white man's coming, the Maoris made linen cloth; it is still a favorite textile.



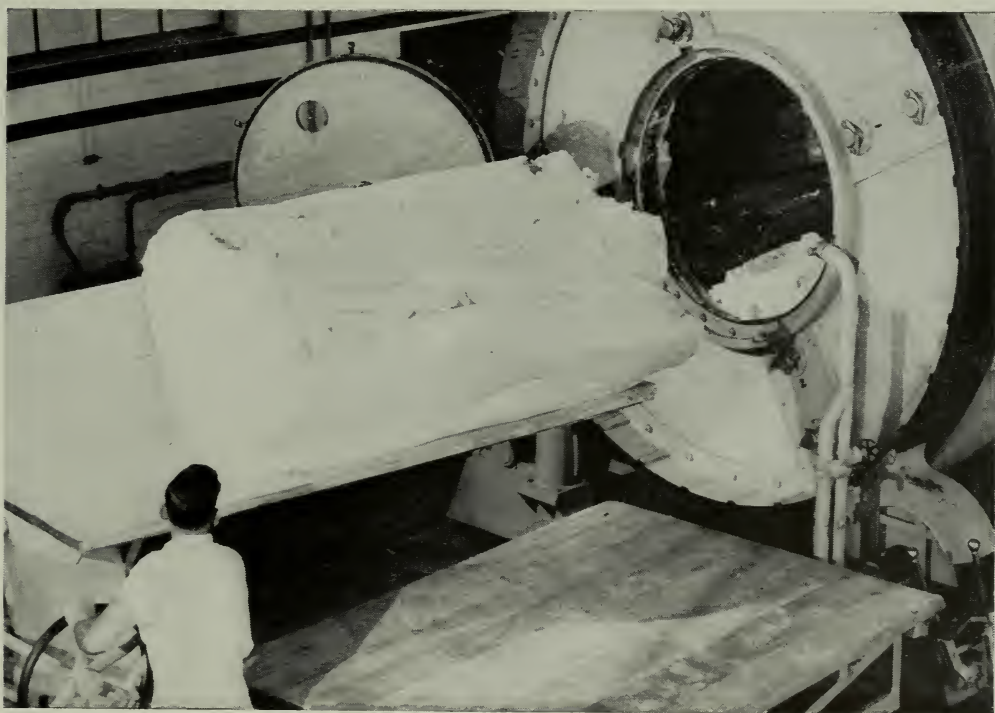
FISHERMAN'S LUCK—A RAINBOW BEAUTY

Trout are not native to New Zealand, but in 1868 some trout spawn were imported and the young fish liberated in streams. Later salmon were introduced. Now there is fine fishing.



FOR DINNER TABLES HALFWAY ROUND THE WORLD

Meat constitutes about 20 per cent of New Zealand's exports, and most of it goes to Great Britain. Modern methods of refrigeration are a boon to shippers and importers alike.



NO BUTTER FINGERS IN THIS MACHINE AGE

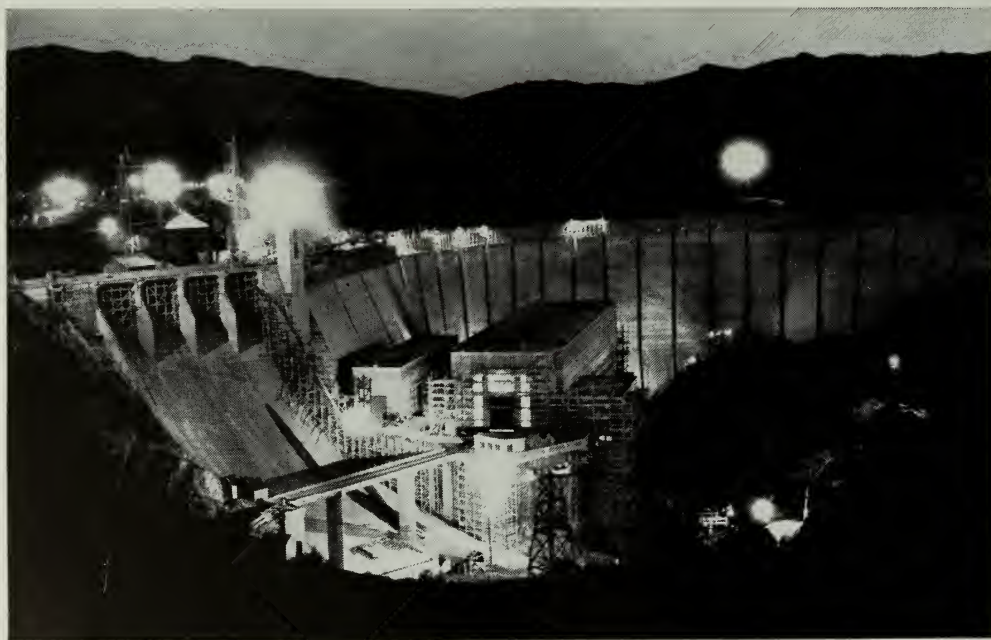
Annual butterfat production in New Zealand reaches about half a billion pounds, producing almost 200,000 tons of butter, besides quantities of cheese and other milk products.



EWING GALLOWAY

WELLINGTON ON ORIENTAL BAY

Wellington, on North Island, founded in 1840, was the first white settlement in New Zealand. It is situated on an inlet of Cook Strait, and commands the largest harbor in the Dominion.



POWER FROM RUNNING WATER

The Waikato River hydroelectric station, now completed, is one of a chain of stations that will add a million horse-power, trebling North Island's electrical production.

This small country is the world's biggest exporter of dairy produce, the second largest exporter of meat and the third largest exporter of wool. Butter, cheese and frozen meats fill the holds of the cargo ships bound for Britain. In a recent year, New Zealand was Britain's biggest supplier of dairy produce and meat.

Cattle Graze All Year Round

Dairy farming in New Zealand is unique, in that it is almost entirely grass-land farming and can be carried on throughout the year without winter housing of stock. Farmers have made a close study of this pastoral farming and have developed a highly efficient technique. To raise the standard of their products and to secure the greatest returns from their land, they have made full use of agricultural research. Cows on most farms are milked by electrically driven machines. The average dairy herd is thirty cows, and the average farm is forty-eight to sixty acres, worked by the farmer and his family with no hired labor.

Sheep farming is efficient and scientific. There are three types of sheep farming—wool-growing, breeding and fat stock farming (for meat), but they merge into one another and the general aim is the production of good meat and good wool from dual-purpose sheep. The productivity of New Zealand farming lands has a direct bearing on the British standard of living. A "Food for Britain" campaign has intensified production, and the farmers, always interested—and successful—in increasing output, have been making special efforts to step up the volume of exports to the United Kingdom. Tangible evidence of their success lies in the fact that New Zealand now supplies 40 per cent of Britain's butter imports, 53 per cent of her cheese imports and a good 30 per cent of her meat imports. Smaller primary industries cover a wide range, producing cereals, fruit, hops, tobacco and flax, mainly for local needs.

In Westland and Southern Nelson, in South Island, are seams of the finest grade coal. At Greymouth and Westport there are large state-owned coal mines.



THE NATION REMEMBERS

The Cenotaph, in Wellington, erected to honor the New Zealanders who fought and died in World War I and who lie buried in foreign soil.

The word "cenotaph" means empty tomb.

Since about 1935, manufacturing and other secondary industries have developed rapidly. Today, they employ one-third of the total labor force. In more than twenty thousand factories, the country processes almost all her own food, makes almost all her own clothing, boots and shoes, leather goods and furniture. Most heavy machinery is still imported, but there are well-established engineering works, iron and brass foundries, coach-building and motor-engineering works. Motor cars and trucks are assembled from imported parts. The manufacture of electrical goods, rubber goods, paint, glass, crockery and plastics is expanding rapidly.

Almost half of New Zealand's people live in cities of over 20,000 population, the largest of these being Auckland, in North Island, with 329,000. This city has grown rapidly in recent years. It offers a pleasant, warm climate, good beaches, and an excellent harbor for yachting. There are many beautiful



PLAYGROUND IN THE SKY

The Remarkable Mountains tower above Lake Wakatipu, South Island, offering a spacious playground to those who love to ski. Above, Coronet Peak (5,415 feet), one of the Remarkables.

homes, which perch on the hills or nestle in the bays, overlooking the harbor.

Nearly five hundred miles south of Auckland lies Wellington, the capital and seat of government. This city has a rugged beauty all its own and is set on one of the best land-locked harbors in the world, deep and wide enough to take the whole British fleet, if need be. Houses cling to the hills that lie behind the city. From the windows of many of these New Zealand homes, there are unsurpassed views of the harbor and city. A view of Wellington at night, with its myriad lights on harbor and hills, has been likened to night views of Hong Kong or Rio de Janeiro.

After crossing Cook Strait that divides North and South Islands and following the eastern coast of the latter for some distance, one arrives at Lyttelton, the port of Christchurch, now the second city in New Zealand. Christchurch is the chief manufacturing center of South Island. It is known as the most "English" city of the country. The pace of life is slower, and there is a restfulness about the tree-lined streets, the river Avon, with its weeping willows and grassy banks, the lovely churches, and attractive residential

suburbs with many gracious homes. For many English people it is the city in which they choose to live after retirement.

Farther south lies Dunedin, capital of Otago province and a university town, first settled by pioneers from Scotland.

The smaller towns have all the conveniences, on a lesser scale, of the cities, with well-paved streets, libraries, sports grounds and race courses. In most cases these smaller towns serve the surrounding farmlands.

The majority of New Zealand dwellings are bungalows, and most of the houses are wooden, though in parts of Auckland and in South Island one notices many brick and stone buildings. In 1951, nine houses were built for every 1,000 of population. The average number of people to every dwelling in the same year was 3.83.

An important factor in the rapid growth of secondary industries has been the development of hydroelectric power from New Zealand's ample water resources. It is the world's most electrified country, with 98 per cent of the homes supplied with electric power. The tremendous demand for power for industrial and domes-

SOUTH-SEA ISLAND NATION

tic purposes has made necessary an ambitious plan for the extension of the country's generating capacity. A chain of ten hydroelectric stations is being built along the Waikato River. When complete, this will generate more than a million horsepower. New stations are also being built in South Island.

Because of its mountains and many rivers, New Zealand has been a difficult country in which to build roads and railways. Nevertheless, today it has well-developed road and rail systems that are being improved and extended continually to keep pace with the changing needs of modern transport. Owned and operated by the Government, the railway system of the country comprises a main trunk system through both islands, with cross-country lines feeding into it. The Government's policy now is to use electric locomotives as much as possible, and a general electrification program has begun.

There are 77,000 miles of roads and highways. Arterial roads—most of them

state highways—provide a fast and safe means of motoring between main centers of population. The modern trend in the design of these state highways is toward the "motorway," to provide safe high-speed travel. On a population basis New Zealand is one of the world's most motorized countries.

Air services link the cities and the main provincial towns. The country is also served by the main international air lines. Air-transport time from Britain is three and a half days, and from Australia eight hours. There is a daily flying-boat service between Wellington and Sydney, and Auckland and Sydney, and a land-plane service between Christchurch and Melbourne.

The Government owns and operates the postal services, the internal airways and the broadcasting service.

In the course of a century, New Zealanders have developed their own national and individual characteristics, but their outlook remains predominantly British.



GRAND PARADE, JUNIOR STYLE

To the Agricultural and Pastoral Shows farmers bring their best stock and produce, and industries exhibit new models of all sorts. Young people have a part in the rodeos and other competitions.



LACE IN STONE, THE TOWER OF AUCKLAND UNIVERSITY COLLEGE

The graceful clock tower of Auckland University College presides over broad lawns shaded by palms and other trees. The college is a part of the University of New Zealand.



A VOLCANO OUTSIDE YOUR WINDOW

The Chateau, a hotel in Tongariro National Park, North Island, offers guests a remarkable view of Mount Ruapehu, a volcano more than nine thousand feet high. The park is in a volcanic area.

They refer to Britain as "home." The Maoris are friendly, hospitable, intelligent and adaptable descendants of the Polynesians, whose canoes were traversing the broad Pacific at a time when European seamen hesitated to venture far from sight of land. As a country, New Zealand is prosperous; it is a land of few extremes, and wealth is widely diffused.

New Zealanders know they need more people in their country, both for its further development and for adequate defense. Through the Government's immigration scheme, several thousand Britons have already been brought to the country to live and work. When it is in full operation, the scheme will provide free or assisted passage for ten thousand new settlers each year. This scheme also provides for a limited number of families from other countries to come to New Zealand. An agreement with the Netherlands Government provides for the immigration of two thousand settlers from Holland annually.

On purely physical standards New Zea-

land has attained a high level. In the population of European descent, death and infant mortality rates are almost the lowest in the world, and the expectancy of life is among the longest. From the prenatal level to the care of the aged, the aim to establish conditions of life that will ensure good health is strongly evident. In the practical education of mothers and expectant mothers the Plunket system has done a tremendous amount of good. Originated in 1907 by the late Sir Truby King, this system has spread from New Zealand throughout the world.

Health standards are closely connected with social welfare, the keystone of which is the Social Security Act. This ensures economic security to all who cannot earn because of age, sickness, or unemployment. Family benefits, medical, hospital and maternity benefits are also paid.

There is no unemployment in the country; in fact, there is a large number of job vacancies. Membership in unions is compulsory, and the working week is of forty hours, spread over five days. New Zea-



THE CATHEDRAL SQUARE, CHRISTCHURCH

Christchurch, on the eastern side of South Island, is laid out around this square. The city was founded by a group of Anglican churchmen; and it is the see of the primate of New Zealand.

land was the first country to adopt the principle of compulsory arbitration in industrial disputes. Minimum rates of wages and other working conditions are embodied in laws that are enforced.

New Zealand has an excellent educational system. The state provides free education for all children up to the age of nineteen. Children must remain at school until they are fifteen. All state primary schools are co-educational, and so, too, are the technical colleges, teachers' training colleges and some of the secondary schools. The Free Kindergarten movement is making rapid progress. In her educational policy New Zealand has aimed at providing facilities giving country children the same educational opportunities as city pupils. For children living in remote places and for invalids, an efficient Correspondence School provides tuition in all grades; radio is often used, and the children miss little except association with their fellows. New Zealand has four university colleges, two agricultural col-

leges and five teachers' training colleges. Parents who prefer to send their children to private schools have a wide choice. Most of these private schools, primary and secondary, are under church supervision. Many of them have boarding facilities, and all are subject to regular inspection by the Education Department of the Government.

The formal link with Britain is the Crown, represented in New Zealand by a governor-general.

New Zealand has its own legislature, or Parliament, which, until 1950, included a Legislative Council and a House of Representatives, the latter corresponding to the British House of Commons. The Legislative Council was abolished in December 1950. The House of Representatives has eighty members, elected every three years on universal adult franchise. Seventy-six members represent constituents of European descent and four are elected by Maori voters. The executive branch of the Government is headed by



RELAXING ON SUMNER BEACH, NEAR CHRISTCHURCH

No part of New Zealand is far from the sea. All the large cities are near the water, with fine sandy beaches within easy reach. The scene above is near Christchurch, South Island.

NEW ZEALAND

the Executive Council, comprising the governor-general and ministers.

Interest in local artists and art forms is growing in New Zealand. For some time the people reserved their applause for visiting performers. Talented New Zealand painters, actors, musicians and dancers had to leave the country to seek recognition. Today, for the first time, they are staying at home. The National Orchestra, founded in 1946 as a branch of the state broadcasting service, has risen steadily in prestige and patronage. The New Zealand Players regularly tour the islands with substantial success. The New Zealand Opera and United

Ballet companies, both recently organized, have made auspicious starts.

The New Zealanders have always been sports-minded, of course. In no other part of the world is the incentive to play in the open air greater than it is in New Zealand. Sport plays an important part in the national life. Organized games are only part of the ordinary New Zealander's sporting interests. Nearness to mountains, lakes, rivers and beaches gives unlimited opportunities for the enjoyment of individual sports such as swimming, tramping, shooting, skiing, angling and yachting.

By N. E. DONOVAN

NEW ZEALAND: FACTS AND FIGURES

THE COUNTRY

A group of islands between the Tasman Sea and the South Pacific Ocean, 1,200 miles south-east of Australia; total area, 103,939 sq. mi. In addition to the main islands, North (44,281 sq. mi.) and South (58,093 sq. mi.), there are a number of others—Stewart (670 sq. mi.), Chatham Islands (372 sq. mi.) and minor islands (320 sq. mi.). The population, including Maoris, 2,326,129.

GOVERNMENT

A sovereign state, it is a member of the Commonwealth of Nations. Executive authority is vested in a governor-general and an Executive Council, or Cabinet. The Cabinet, made up of a Prime Minister and 15 other ministers who represent the majority party in Parliament, carries on the government. Legislative power is vested in the House of Representatives; another chamber of Parliament, the Legislative Council, was abolished as of January 1, 1951. All adults, male and female, have the right to vote; Maoris have 4 seats in the House.

COMMERCE AND INDUSTRIES

Two thirds of the land is suitable for farming and grazing. Principal crops are wheat, oats and barley. The country's principal industry is animal husbandry; livestock: 5,800,000 cattle, 46,000,000 sheep; world's third largest producer of wool; one of the ten leading producers of meat. Leading manufactures are butter and cheese, preserved meats, clothing, prepared wood, auto bodies and parts, and fertilizers. Leading minerals are coal, gold, silver, silicon, serpentine, iron ore and petroleum. Chief exports are wool, butter, frozen meats, cheese, hides, skins and pelts. Imports include machinery, cotton goods. Monetary unit, the New Zealand pound.

COMMUNICATIONS

Railway mileage for North and South islands is 3,504 miles. The railroads are operated by

the Government. Road mileage, about 56,000. There is regular domestic and international air service. The telegraph and telephone systems are government-owned; number of telephone subscribers, 605,000. Number of radio transmitting stations, 31.

RELIGION AND EDUCATION

There is no established or aided religion; Church of England predominates; numerous other faiths are represented. Education is compulsory for ages 7 to 15 and free for regular public course. There are 2,460 public and private primary schools; 143 public and private secondary schools; 109 district high schools, including 9 Maori high schools; 33 technical schools. In addition, the University of New Zealand embraces 4 component universities and 2 agricultural colleges. There are 6 teacher-training colleges. Also there are 164 Maori village schools and 10 Maori mission schools.

CHIEF CITIES (WITH POPULATIONS)

Wellington (capital), 143,009; Auckland, 413,000; Christchurch, 210,000; Dunedin, 102,000; Hutt, 93,000; Hamilton, 38,000; Palmerston North, 37,000; Invercargill, 35,000; Wanganui, 34,000.

ISLANDS

Chatham Islands, consisting of Chatham and Pitt islands, are 422 miles southeast of Wellington and are administered as a county. Population of about 700 is occupied mostly in animal husbandry. Stewart Island, part of Southland district, is separated from South Island by Foveaux Strait. It is a tourist resort. Principal among the minor islands within geographical limits are Kermadec Islands and Campbell Island.

Outer possessions include Cook Islands, Niue Island and the Tokelau group. New Zealand administers Western Samoa under a UN trusteeship (for facts and figures on these outlying territories see page 321).

The Maoris

... New Zealand's

native people today

THE Maori people of New Zealand have been described as the leading Polynesian stock of the Pacific. It is a distinction amply justified by their intelligence, which is reflected in a wide and interesting variety of highly developed arts and crafts, handed down and improved through the centuries. The Maori has also endowed New Zealand with a wealth of mythology, traditions and legends, history and poetry, forming a rich store of material and inspiration for the writers, artists and poets of today.

By their own efforts, guided by their own outstanding leaders, and with the assistance of New Zealanders of European descent, the Maoris have raised themselves to a state of equality in every sphere of life. Today there is less evidence of a color bar in New Zealand than in any other part of the world. Maori development in recent years is no longer a progress toward equality, but one toward a closer partnership with the Europeans. There has been a sharing of civic and national responsibility since 1852, when the Constitution Act gave Maoris the same voting rights as Europeans. The Maoris exercise fully their right to return four members of Parliament.

In a population of 2,200,000 people, the Maoris number about 150,000, compared with 57,000 in 1921. The Maori birth rate has reached an average of 45 per 1,000, almost double that of the New Zealanders of European descent. Were it not for their higher death rate among children, the Maoris would be more numerous. If the death and birth rates remain constant, there will be 547,000 Maoris by 2005; but there is every hope that they will number many more than that with the increasing number of Maori doctors, dentists, nurses and teachers

working among their own people, and helping to break down the old reluctance to take advantage of modern treatment.

The discovery of Aotearoa (Long White Cloud), as New Zealand was named by the first Maori navigator, is attributed to their hero Kupe, who made one of the world's great sea voyages in a sturdy outrigger. He came to New Zealand by holding "a course to the left of the setting sun" according to Maori lore. When he reached the country, he sailed around both North and South Islands, giving to capes and bays and other features along the coast names that survive to this day. Kupe was followed 200 years later by Toi of Tahiti, using the sailing directions left by Kupe; and 600 years later by Captain Cook, who sailed around both islands in the same manner as Kupe had done, although at the time Captain Cook did not know of the great Maori sailor who had preceded him by several centuries. It was in the four-

A MAORI LAD poses happily beside an example of his people's intricate carving.

WAAGENAAR, PIX



THE MAORIS TODAY

teenth century that the main Maori migration to New Zealand took place.

Scientists who study races and their cultures believe that the Maoris came to New Zealand from Hawaiki, subsequently identified as Raiatea, in the Society Islands. The history and migrations of the Maoris and their settlement of the island groups of the central and eastern Pacific are given in the late Sir Peter Buck's book, *THE VIKINGS OF THE SUNRISE*. Sir Peter, director of the Bishop Museum in Honolulu at the time of his death, late in 1951, and himself half Maori, was the best-qualified person to disentangle history from myth in the lore of his people, which was handed down only by word of mouth. He said that the Maoris entered the Pacific from somewhere in the Malay Archipelago, moving south by way of the Micronesian Islands, to the Caroline and Marshall groups, from where they spread: northeast to the Sandwich (present-day Hawaiian)

Islands; south to Samoa; southeast to the Society Islands; and then to New Zealand by way of the Cook Islands. Sir Peter came to the conclusion that the settlement of the group of islands in central Polynesia took place about the fifth century A.D.

Speaking on the origin of the Maoris, Sir Peter stated that in remote ages the ancestors of the Polynesians probably lived in some part of India, and worked east, but myths and legends do not reach back that far.

"They must have sojourned in Indonesia in order to reach the Pacific: the Polynesian language has affinities with Indonesian dialects," he said. "When the pressure of Mongoloid peoples, pouring in from the mainland, became oppressive, the Polynesian ancestors turned their gaze towards the eastern horizons, and embarked upon one of the greatest of all adventures." The same pressure of population, and also dissatisfaction with the



A KISS BY ANOTHER NAME

The Maori salutation, or welcome, is called "Hongi." It consists of a handclasp and touching of noses. These women of North Island have bobbed hair in the European manner.



ALL PHOTOS, NEW ZEALAND EMBASSY

THE ANCIENT ART OF WOOD CARVING

The center pole of the entrance to this Maori meeting house suggests, in its carving, the Indian totem poles. Most Maori patterns are in curves, straight lines being rare.



THE MEETING HOUSE AT GISBORNE

The Maori *pa*, or village, is usually built facing the *marae*, the open grassy space in front of the meeting house. Most meeting houses have a large social hall and kitchen attached.



THE SOLEMN CEREMONY OF TATTOOING

"Tattoo" (*tatu*) is a Polynesian word. The custom of tattooing, once widespread among the Polynesian peoples, is on the decline now. The Maoris developed the art to a high degree.

social order in the islands of the Pacific, led to the last great migration, which took the emigrants to New Zealand. By the time this happened, "Long White Cloud" was more than a legend to the Maori people. Kupe's discovery had been rediscovered, and the Maoris had all the necessary information to steer them to "the land full of birds," as Kupe put it.

The Little Fleet of Eight Canoes

The migratory party, with supplies of food, food plants, and seeds, set sail about 1350 A.D., in eight big outrigger canoes bearing the historic names of Tainui, Arawa, Takitimu, Aotea, Mataatua, Kurahaupo, Tokomaru and Horouta. Maoris today, as in the past, trace their descent to an ancestor who came in one of these canoes. "Coming over in the canoe" is to the Maori what "coming over in the Mayflower" is to Americans.

So the Maori settlement of New Zealand began. In South Island the new arrivals found the remnants of a race called the Moriori. These people, according to legend, had come to New Zealand in the last of a series of migratory waves from the Pacific Islands that had begun in the eighth century. This legend is supported by the fact that the Morioris also understood navigation. When the Morioris finally had to make way for the more vigorous Maori newcomers, they migrated to the Chatham Islands, some five hundred miles east of New Zealand. The last full-blooded Moriori died there about 1920; but some hundreds of Moriori descendants, partly of Maori or European stock, still live in the Chathams, where the main occupations are sheep-farming and fishing.

The Maori's settlement of New Zealand, looked at from any angle, was an outstanding success. He overcame all his formidable initial difficulties—a land vastly bigger than his previous island home; a colder climate, in which the kumara (sweet potato) was the only one of the many island food plants he brought with him that survived; and a climate that demanded much warmer clothing and housing.

The Maori prospered and multiplied. The nineteenth century saw the beginning

of European settlement in New Zealand, but it was not until 1840 that ordered government was constituted. This followed the Treaty of Waitangi, under which New Zealand became a Crown Colony of Britain. The treaty was signed by Lieutenant-Governor Captain Hobson, representing the British Government, and by a majority of the Maori chiefs.

The Treaty of Waitangi comprises three short articles. In the first, the Maoris ceded "all rights and powers of sovereignty" to Queen Victoria. In the second, the Queen confirmed the chiefs and their families "in full, exclusive, and undisturbed possession of their lands and estates, forests, fisheries and other properties." However, the chiefs had to yield to the Crown the exclusive right of purchase over such lands as the proprietors were disposed to transfer. In the third article, the Queen gave to the Maoris all the rights and privileges of British subjects.

The Maori people have always been grateful for British protection and they are proud to be British subjects. During the

PIPING HOT WATER, BUT NO PIPES

Nature supplies the hot water for this young man's daily bath in the lake near his home. Around Rotorua, North Island, there are many hot-water pools and lakes and geysers.



second World War, their leader, the late Sir Apirana Ngata expressed that feeling when he declared:

"The protection enjoyed under the British flag was something no other nation could offer its peoples. Our war effort has been prompted by a full appreciation of the democratic principles, and by a desire to uphold the British Crown and Commonwealth and institutions, which guaranteed to all native peoples incorporated in the Empire, just and democratic treatment, such as native populations under other governments marvel at. To have failed to help at a time when the Empire and its principles were in deadly peril would have been an act of baseness. However, no one can accuse the Maori people of having failed in their duty."

Young Maoris to the Rescue

For fifty years after the arrival of the Europeans, the Maori population gradually decreased. A band of Maori intellectuals, known as the Young Maori Party, waged a battle for racial survival. They were led by Ngata, who had obtained the degrees of Master of Arts and Bachelor of Laws—he was the first member of his race to graduate. It was due to the devoted efforts of the Young Maoris that the decline in population was arrested. But the fight was uphill all the way. The battle was for better physical health, for improved educational opportunity, for understanding of the *pakeha's* (European's) way of life and adjustment of the Maori to it. The Maori moral code and age-old customs had to be adapted to Western civilization. The spiritual life of the race had to be refreshed and deepened. At the turn of the century, there began an astonishing resurgence, possibly without parallel in modern times.

This spectacular rise in the Maori population brought an economic problem—the problem of assuring a livelihood to the thousands of young Maori men and women of the present and future generations. No longer was the three million acres of reasonably good land, which was all that remained of the Maori ancestral holdings, able to maintain such a population.

More and more the young Maori had to

seek a livelihood in the professions and industries of the cities and towns. This movement, which first became pronounced during the years of the first World War, presently received a new impetus as the result of an enlightened government policy. The keystone of this wise policy was the absence of racial barriers in the way of the Maori.

Today, Maori doctors, dentists, lawyers, accountants, school teachers (both men and women), nurses and dental nurses, skilled tradesmen and other Maori workers are playing a prominent part in New Zealand's economic and industrial life.

Two important government departments are administered by Maoris—one of them the Department of Maori Affairs, which is responsible for the vast development schemes of Maori-owned lands.

The whole field of education, from kindergarten to university, is now open to the Maori on exactly the same liberal terms as are enjoyed by the rest of the population. Much progress has been made in improving the standards of Maori housing and health.

Helping Maoris on the Land

All avenues of government employment, as well as private employment, are open to Maoris. There have been spectacular advances by which big areas of Maori-owned land lying fallow or underdeveloped for many years have been brought into production. The successful development scheme was initiated in 1929 by Sir Apirana Ngata, the most able administrator the Maori race has produced. In his capacity as Minister of Maori Affairs, he drafted legislation that laid the cornerstone for the enterprise which is today so lucrative for the Maori owners. The lands chosen for development are at first administered by the Department of Maori Affairs. During the development period, young Maoris are trained to be farmers, and when the land is ready these young men take it over.

Other Maori leaders who contributed to the renaissance of the race include the late Sir James Carroll, member of Parliament, and minister of the Crown; Sir



FEATHER CLOAK AND TATTOOING ONCE INDICATED RANK

The modern Maori chieftain no longer wears the traditional garb, a feathered cloak, nor is his face tattooed. He is a university man, trained for leadership in today's complex world.



PAPAKURA GEYSER, "A VOLCANO OF WATER"

At Whakarewarewa, North Island, geysers eject columns of water and steam at fixed intervals, to the accompaniment of underground rumblings or sharp reports. Papakura geyser is awe-inspiring.



A COMMUNITY LAUNDRY IN THE OPEN AIR

In the hot springs area of North Island, some pools and lakes are used for washing and different ones for cooking. There are pools of varying degrees of warmth in this astonishing district.



ONE OF MOTHER NATURE'S COOKSTOVES

Yes, you can make a fricassee or cook cereal in this outdoor pool at Whakarewarewa. In past stages this whole area was a mass of spouting volcanoes. The activity has by no means died.



TRADITIONAL BEAUTY

Maori wood carving is a craft that has been handed down from father to son for generations. The work is done by hand, with slow and loving care. The art is encouraged by the Government.

Maui Pomare, the first Maori to become a doctor of medicine, and who later became Minister of Health; the late Sir Peter Buck, who represented the Maori race on the Executive Council, and was Director of Maori Hygiene, and later director of the Bishop Museum, in Honolulu. These men, and many others, spurred the race to effort after a period of decline that many thought would extinguish the Maori race forever.

These leaders were also conscious of their duties to the nation as a whole, as were their people. The Maori battalions raised to fight in two world wars were made up of volunteers, and their courage and enterprise on all the battlefields on which they fought is a cherished and glorious part of New Zealand's military record. The Maori, sensible of the reputation of his warrior ancestors, and displaying an inherent instinct for military tactics and strategy, covered himself with glory. One of them was the youthful Te Moana-Nui-a-kiwa-Ngarimu, a second lieutenant in the infantry. He won the Victoria Cross for outstanding leadership and courage in leading several charges against German positions in Tunisia, until he fell at

the head of the last charge, which he commanded although already severely wounded.

The resurgence developed under the aegis of Ngata, Buck, Pomare and Carroll goes on uninterrupted. The preservation of Maori culture has manifested itself in the erection of many of the finely carved traditional meeting-houses, in a renewed interest in the arts and crafts and in the Maori language. In this work many New Zealanders of European descent are actively interested; and the Government has spent considerable sums of money to help the Maori race revive its culture.

There is much still to be done in this direction, but the main social and political obstacles, which would have made a cultural renaissance impossible, have long been removed. All the people of New Zealand may take pride in this achievement, by which a rich heritage has been preserved and is being fostered. The whole of the Maori outlook today is one of high hope and confidence.

BY GEORGE BRYANT



EDUCATION FOR TOMORROW

Maori youth are being educated in the sciences to take their place in the atomic age. Practically all Maori children and young people go to school, with European classmates.







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